



Department of
Environmental
Conservation

New York State Department of Environmental
Conservation

Oswego Castings Site 2015 Annual Groundwater Monitoring Report

NYSDEC Site Number 7-38-033

December 2015

OSWEGO CASTINGS SITE 2015 ANNUAL GROUNDWATER MONITORING REPORT

NYSDEC Site Number 7-38-033



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Our Ref.:

00266404.0000

Date:

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ACRONYMS AND ABBREVIATIONS

amsl	Above Mean Sea Level
DO	Dissolved Oxygen
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
O&M	Operation and Maintenance
OU	Operable Unit
PCBs	Poly-chlorinated Biphenyls
REDOX	Oxidation-Reduction Potential
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
TDS	Total Dissolved Solids
ug/L	Micrograms per liter
USEPA	United States Environmental Protection Agency

1 INTRODUCTION

The NYSDEC has issued a Work Assignment (# D007618-11) to ARCADIS CE, Inc. (Arcadis), for Operation, Maintenance, and Monitoring at the Oswego Castings Site (NYSDEC site number 7-38-033) in Oswego, Oswego County, New York. This Annual Report has been prepared to summarize the 2015 annual O&M and groundwater sampling activities.

2 SITE DESCRIPTION AND BACKGROUND

2.1 Description

The Oswego Castings site is located at 375 Mitchell Street, Oswego, Oswego County, New York (Figure 2-1). The site is approximately 10 acres and contains three former manufacturing buildings. A former cooling water pond is located west of the buildings. The site is currently zoned industrial and was most-recently the location of a saw mill operation. The site is listed as a Class 04 site on the NYSDEC Registry of Inactive Hazardous Waste Sites.

2.2 Background

The site was formerly owned by B and K Metals Inc. (B&K Metals). Oswego Castings Inc., a subsidiary of Oberdorfer Foundries, Inc. operated an aluminum die casting facility on the site from 1956 to 1986. PCBs were detected on the site in core sands, foundry waste, and wastewater discharged to a process line/septic tank discharge line. The expected sources of the PCBs include leaks in hydraulic equipment and binders or coatings applied to core sand surfaces. In July 1993 B&K Metals entered into an Order on Consent with the NYSDEC for a RI/FS. The RI/FS was conducted between July 1993 and February 1997. A ROD was issued for OU-1 in 1997. The OU-1 ROD required excavation of approximately 4,100 cubic yards of soil, sediment, and foundry sand. In addition the ROD called for removal of the septic tank and placement of crushed stone over the existing on-site landfill. A ROD for OU-2 was issued in 2000, requiring construction of a concrete pad over the yard area and floor of the saw mill (Figure 2-2).

In May 2010 the stone buffer for the landfill was re-graded and landscape fabric and new stone were applied to the landfill cap. In April 2010, groundwater monitoring well MW-2 was replaced and three new monitoring wells were installed (MW-5, MW-6, and MW-7).

An Environmental Notice was placed on the site in November 2011. The purpose of the Notice was to limit the use of the site to industrial and/or commercial use; prevent owners from tampering with the remedial action; prevent use of on-site groundwater; and grant access to the NYSDEC and its agents for purposes of maintaining the remedy.

3 OPERATION AND MAINTENANCE

O&M activities were performed on April 23, 2015 by ARCADIS and included inspection of the respective landfill and yard area protective covers and pond area (Figure 2-2). An O&M Checklist (Appendix A) was used to document the findings of the inspection. A photograph log of the site is provided in Appendix B.

3.1 Landfill Cover

A visual inspection of the landfill cover was performed to assess the landfill for erosion, settlement, ponded water, burrowing rodents, and brush or woody vegetation. As shown in the O&M Checklist (Appendix A), wood chips, apparently from the former saw mill operation, were covering the landfill area but did not appear to be impacting the performance of the cover. In addition, the northern area of the cover had areas of ponded water; however, the inspection was performed following a significant snow pack melt. Based on previous site inspections by Arcadis, the ponded areas are not likely to be present during the remainder of the year.

3.2 Concrete Cover

A visual inspection of the concrete cover was performed to inspect the integrity of the remedy. As shown in Appendix A, the concrete cap had minor cracks but did not contain evidence of settlement or other damage. As shown in Appendix A and Appendix B, debris (primarily wood chips and boards) were present on the concrete cap.

3.3 Pond Area

A visual inspection of the pond area was performed to inspect the banks of the pond for erosion and for areas of sparse vegetation. No erosion issues were identified and vegetation along the perimeter of the pond appeared to be well established.

3.4 General Site Conditions

3.4.1 Buildings and Grounds

As shown in Appendix B, the buildings at the site are not secure and have been vandalized. Based on inspections of the interior of the buildings, copper wire and/or plumbing components have apparently been removed. Gravel and asphalt piles were identified in the concrete block building, presumably from the Town of Oswego. Several open drums of sand were also identified in the former saw mill building. In addition, a pad-mounted transformer on the eastern side of the former sawmill building was vandalized and found to have its access doors open and internal components cut and removed. The transformer had no visible indications of leaks. National Grid was contacted during the site inspection and the incident reported. A National Grid field technician was dispatched to the site to inspect the transformer and secured the doors with a new lock.

3.4.2 NYSDEC Spills Incident

During the general site inspection on April 23, 2015, two spills were identified in two separate on-site buildings. Figure 3-1 shows the locations of the spills. Photographs of the spill areas are included in Appendix B. An oil leak was found in the south end of storage building adjacent to MW-4. Five 55 gallon drums, five five-gallon pails, and several drain pans and other containers of used oil were in the building. The concrete floor in the building was stained and oil could be seen weeping from the base of one of the rusted 55-gallon drums.

A second spill was identified in a structure along the north side of the concrete block building. The spill in this area included two unidentified five-gallon pails of liquid and a 55-gallon drum labeled "bar and chain oil" that was on its side. The floor of the building in the vicinity of the two pails and 55 gallon drum was visibly stained and water accumulated in the area had a sheen. Upon identification of the spills, the NYSDEC Project Manager and Spill Hotline were notified and the spill reported. The associated NYSDEC Spill Number is 1500821. After the NYSDEC were notified, absorbent material was placed over the vicinity of visibly leaking oil and floor staining. According the NYSDEC Spills Database, the incident was closed on October 22, 2015.

4 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring wells were sampled on April 23, 2015 by ARCADIS to provide information on groundwater quality, monitor contaminant migration, and assess hydrogeologic site conditions, including groundwater flow direction. Groundwater monitoring well locations are shown on Figure 4-1.

4.1 Groundwater Monitoring Well Inspection

The integrity of each well was inspected and the results recorded on a groundwater monitoring well inspection form (Appendix C). Photographs of each well are also provided in Appendix C. As indicated in the inspection forms and shown on the photographs, the monitoring wells are in acceptable condition and no significant problems were reported.

4.2 Water Level Survey

Prior to collecting groundwater samples, water levels were measured to the nearest hundredth of a foot. A summary of these data are presented on the groundwater level data form in Appendix D.

Table 4-1 summarizes the groundwater elevations. A potentiometric surface map is provided on Figure 4-2. As shown in Table 4-1, groundwater elevations ranged from 325.00 ft amsl at MW-6 to 307.82 ft amsl at MW-5. As shown on Figure 4-2, the direction of groundwater flow is generally toward the northwest.

4.3 Groundwater Sampling

Groundwater samples were collected from seven groundwater monitoring wells (MW-1, MW-2R, MW-3, MW-4, MW-5, MW-6, and MW-7) using low-flow groundwater purging and sampling procedures.

Prior to collecting groundwater samples, pH, conductivity, turbidity, DO, temperature, salinity, TDS, and REDOX were measured using a Horiba U-52 water quality meter and recorded on groundwater sampling purge logs. A duplicate sample (MW-X) was collected from MW-4. Groundwater sampling purge logs are presented in Appendix E.

Groundwater samples were collected and submitted to Spectrum Analytical by chain-of-custody procedures and analyzed for PCBs by USEPA Method 8082. The laboratory analytical data are provided in Appendix F.

The site is currently being sampled every five quarters, therefore, the next groundwater sampling event will be conducted during the third quarter 2016.

4.4 Groundwater Sampling Results

Groundwater sample results are summarized in Table 4-2. As shown in Table 4-2, the groundwater samples collected from MW-1 contained concentrations of PCB Aroclor 1248 (120 micrograms per liter (ug/L)) that exceeded the corresponding NYSDEC Class GA Standard of 0.09 ug/L. As shown in Table 4-2, this result is greater than the October 2013 Aroclor concentration (29 ug/L) from this well. The groundwater samples collected from MW-4 contained concentrations of PCB Aroclor -1248 and Aroclor-

1254 (0.56 ug/L and 0.13 ug/L, respectively) that exceeded the corresponding NYSDEC Class GA Standard of 0.09 ug/L. As shown in Table 4-2, the samples collected from these wells during the October 2013 sampling event did not contain any detectable concentrations of these Aroclors, however the groundwater samples from MW-4 contained a detectable concentration of Aroclor-1242 (0.89 ug/L). Table 4-2 shows none of the other groundwater samples contained concentrations of PCBs greater than the indicated quantitation limits.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The landfill and yard area protective covers are in acceptable condition and operating as intended. In addition, there are no visible signs of erosion or sparse vegetation in the pond area. Although wood and/or other debris is present on each of the protective cover areas, it does not appear to be impacting the performance of the cover systems.

The site buildings have been vandalized and the general condition of the buildings is deteriorating. In addition, storage containers for used oil and/or other liquids left on site from prior operations have deteriorated, resulting in two petroleum spills.

Based on groundwater level data, the direction of groundwater flow is generally toward the northwest. The samples collected from groundwater monitoring wells MW-1 and MW-4 contained PCBs at concentrations greater than the respective NYSDEC Class GA Standard. None of the other groundwater samples collected from the site contained detectable concentrations of PCBs, including down-gradient monitoring wells MW-5 and MW-7.

5.2 Recommendations

Based on the concentrations of PCBs in groundwater, annual groundwater monitoring should continue to be conducted to evaluate the impacts to groundwater quality over time.

As a result of the spill that was discovered in the building near monitoring well MW-4, it is recommended that monitoring well MW-4 also be sampled for the presence of petroleum-related compounds during the next sampling event.

6 SUMMARY

O&M activities were conducted on April 23, 2015. The landfill and yard area protective covers and pond area were inspected and appear to be performing as intended. The site is not currently active and the buildings are not secure. As a result, vandalism and looting of copper from the buildings and a pad-mounted transformer appears to have occurred.

Two new petroleum spills were identified at the site. The spills were contained and the NYSDEC Spill Hotline notified. The spill incident was reported to be closed on October 22, 2015.

Monitoring wells were inspected and are in acceptable condition. Groundwater levels indicate that the direction of groundwater flow across the site is generally towards the northwest. Groundwater samples contained concentrations of PCB greater than the corresponding NYSDEC Standards at two sampling locations.

Based on the recent spill, it is recommended that the analytical testing for groundwater samples from MW-4 include petroleum-related compounds.

TABLES



Table 4-1
Groundwater Elevation Data
Oswego Castings Site
NYSDEC Site Number 738033

Well	Measuring Point Elevation	9/25/2012		10/17/2013		4/23/2015	
		Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
	Ft amsl	Ft BTOC	Ft amsl	Ft BTOC	Ft amsl	Ft BTOC	Ft amsl
MW-1	313.29	10.85	302.44	5.37	307.92	2.82	310.47
MW-2R	313.11	6.67	306.44	3.13	309.98	2.42	310.69
MW-3	311.72	10.61	301.11	6.45	305.27	2.43	309.29
MW-4	312.45	4.46	307.99	3.80	308.65	3.04	309.41
MW-5	312.70	14.91	297.79	9.55	303.15	4.88	307.82
MW-6	331.82	14.35	317.47	10.85	320.97	6.82	325.00
MW-7	314.11	12.20	301.91	6.54	307.57	2.70	311.41

Ft amsl - feet above mean sea level

Ft BTOC - feet below top of casing

Table 4-2
Summary of Groundwater
Sampling Results (PCBs)
Oswego Casting Site
Site Number 7-38-033

Well Date	NYSDEC Class GA Standards ug/L	MW-1 9/25/2012 ug/L	MW-1 10/17/2013 ug/L	MW-1 4/23/2015 ug/L	MW-2R 9/24/2012 ug/L	MW-2R 10/17/2013 ug/L	MW-2R 4/23/2015 ug/L	MW-3 9/24/2012 ug/L	MW-3 10/17/2013 ug/L	MW-3 4/23/2015 ug/L	MW-4 9/24/2012 ug/L	MW-4 10/17/2013 ug/L	MW-4 4/23/2015 ug/L
Aroclor-1016	0.09**	54	5.0 U	5.0 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U
Aroclor-1221	0.09**	0.17 U	5.0 U	5.0 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U
Aroclor-1232	0.09**	0.17 U	5.0 U	5.0 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U
Aroclor-1242	0.09**	0.17 U	5.0 U	5.0 U	0.17 U	0.05 U	0.05 U	0.17 U	0.13	0.05 U	0.17 U	0.89	0.05 U
Aroclor-1248	0.09**	0.17 U	29	120	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.56
Aroclor-1254	0.09**	0.17 U	5.0 U	5.0 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.13
Aroclor-1260	0.09**	0.17 U	5.0 U	5.0 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U
Aroclor-1262	0.09**	NA	5.0 U	5.0 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U
Aroclor-1268	0.09**	NA	5.0 U	5.0 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U

* - MW-X is a duplicate sample collected from MW-4
 ** - Sum of these compounds can not exceed 0.09 ug/L.
 NA - Compound not analyzed

Table 4-2
Summary of Groundwater
Sampling Results (PCBs)
Oswego Casting Site
Site Number 7-38-033

Well Date	NYSDEC Class GA Standards	MW-5 9/25/2012	MW-5 10/17/2013	MW-5 4/23/2015	MW-6 9/24/2012	MW-6 10/17/2013	MW-6 4/23/2015	MW-7 9/25/2012	MW-7 10/17/2013	MW-7 4/23/2015	MW-X* 4/23/2015
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.05 U
Aroclor-1221	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.05 U
Aroclor-1232	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.05 U
Aroclor-1242	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.05 U
Aroclor-1248	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.46
Aroclor-1254	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.10
Aroclor-1260	0.09**	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.17 U	0.05 U	0.05 U	0.05 U
Aroclor-1262	0.09**	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	0.05 U
Aroclor-1268	0.09**	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	NA	0.05 U	0.05 U	0.05 U

* - MW-X is a duplicate sample
collected from MW-4

** - Sum of these compounds can
not exceed 0.09 ug/L.

NA - Compound not analyzed

FIGURES



Figure 2-1
Site Location
Oswego Castings Site
Oswego, New York
NYSDEC Site 7-38-033

0  2,000 ft



G:\GIS\OD00266404.0000\SITE\MAP.mxd
G:\PROJECT\00266404.0000\PRR\Figure 2-2 - Site Map.pdf



Legend

- | | | | |
|--|---------------------------|--|---------------------|
| | Monitoring Well | | IRM Area (1997 ROD) |
| | Approximate Site Boundary | | IRM Area (2000 ROD) |
| | OU-1 | | |
| | OU-2 | | |

Note: Remedial area boundaries are approximate.

New York State Department of Environmental Conservation
Site Number 738033
Oswego Castings, Oswego, New York

SITE MAP



FIGURE

2-2

Figure 3-1 Spill Locations

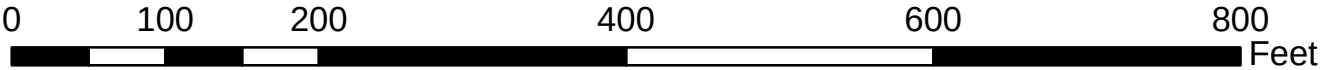
Oswego Casting Site
Oswego, New York
NYSDEC Site Number 7-38-033



G:\GIS\MOD\00266404.0000\WELLS.mxd
G:\PROJECT\100266404.0000\Reports\Figure 4-1 Wells.pdf



Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Legend

Monitoring Well

New York State Department of Environmental Conservation
Site Number 738033
Oswego Castings, Oswego, New York

MONITORING WELL LOCATIONS



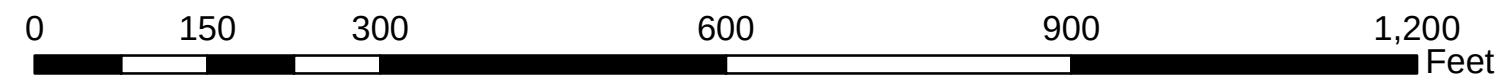
FIGURE
4-1

G:\GIS\MOD\00266404\0000\POTMAP_oct2013.mxd
G:\PROJECT\00266404\0000\Reports\PRR\Figure 5-2.pdf



Legend

- Monitoring Well
- Approximate Site Boundary
- Potentiometric Contour (Feet Above Mean Sea Level)
- 297.79 Groundwater Elevation (Feet Above Mean Sea Level)



New York State Department of Environmental Conservation
Site Number 738033
Oswego Castings, Oswego, New York

GROUNDWATER POTENTIOMETRIC MAP
April 23, 2015

ARCADIS

FIGURE
4-2

APPENDIX A

O&M Checklist



OSWEGO CASTINGS SITE
Landfill and Concrete Cap Operation and Maintenance Checklist

Inspected by: Jeremy Wyckoff

Date: 4/23/2015 Time: 11:00

Weather Conditions: Overcast. 40 degrees F.

LANDFILL COVER SYSTEM

Erosion	<u> </u>	YES	<u> X </u>	NO
Cap Settlement	<u> </u>	YES	<u> X </u>	NO
Ponded Water or Wet Areas	<u> X </u>	YES	<u> </u>	NO
Burrowing Rodents	<u> </u>	YES	<u> X </u>	NO
Brush or Other Woody Vegetation	<u> </u>	YES	<u> X </u>	NO

Comments: Wood chips and wood debris across cover.

Wet/ponded areas near northern area of cover - recent substantial snow melt.

CONCRETE COVER

Cracked Concrete	<u> X </u>	YES	<u> </u>	NO
Damaged Concrete	<u> </u>	YES	<u> X </u>	NO
Concrete Settlement	<u> </u>	YES	<u> X </u>	NO
Ponded Water or Wet Areas	<u> </u>	YES	<u> X </u>	NO
Presence of Vegetation	<u> </u>	YES	<u> X </u>	NO

Comments: Wood and other debris across concrete cap.

Note: Pond area inspected. no visible erosion. Vegetation well established along perimeter.

INSPECTOR'S SIGNATURE JRW DATE 4/23/2015

APPENDIX B

Site Photographs





Site facing northeast



Site facing west



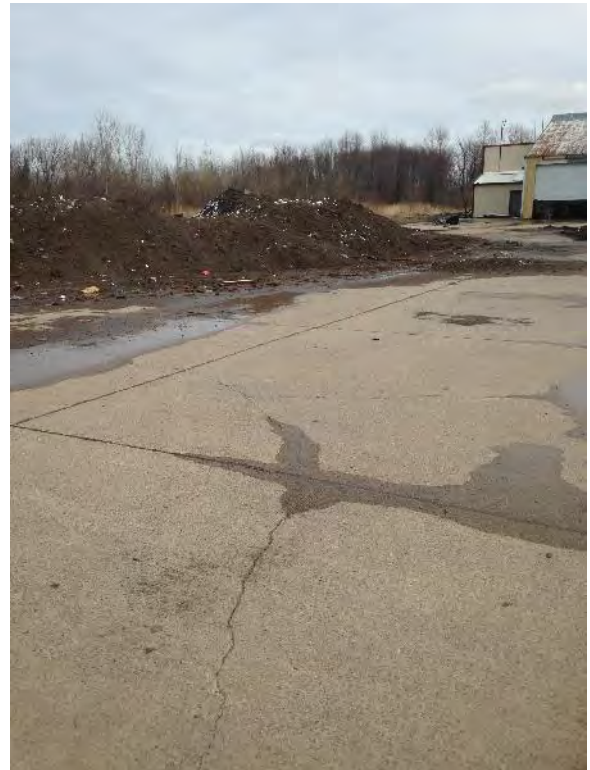
Site facing south from
near MW-7



Concrete cap in Yard
Area – Panoramic
photograph from west to
north.



Yard Area - Typical
cracks in concrete cap.





Landfill Area – facing
northwest.



Landfill Area – facing
northeast.



Pond Area – facing north.



Pond Area – facing west.



Asphalt pile in southwest corner of block building



Gravel pile and debris in block building – facing east.



Interior of former saw mill
building facing south



Drums of sand in
northeast corner of
former saw mill building



Unsecured transformer
on eastern side of
buildings.



East side of block
building.



Leaking oil drums in
building adjacent to MW-4.



Spill area with absorbent
material.



Leaking buckets and drum on north side of block building.



Spill area with absorbent material.



MW-1



MW-2R



MW-3



MW-4



MW-5



MW-6



MW-7

APPENDIX C

Well Inspection Forms





GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Oswego Castings PROJECT NUMBER: 00266404
DATE OF INSPECTION: 4/23/15 INSPECTOR: A. Goodrich
WELL DESIGNATION: mw-1
WELL LOCATION: South/adjacent to main building

Outward Appearance

Flushmount Diameter _____ inches N/A ☒
Approximate Stickup Height ~3 feet N/A ☐
Integrity of Protective Casing Describe: good, slightly rusted
Protective Casing Material Steel ☒ Stainless Steel ☐ Other _____
Protective Casing Width or Dia. 6 inches
Weep Hole in Protective Casing Yes ☐ No ☒
Surface Seal/Apron Material Cement ☒ Bentonite ☐ Not apparent ☐ Other _____
Integrity of Surface Seal/Apron Describe: good
Surface Drainage Away from Wellhead ☒ Toward Wellhead ☐
Bollards Present? Yes ☐ No ☒ Describe: _____
Well ID. Visible? Yes ☐ No ☒ Describe: _____
Lock Present and Functional? Yes ☒ No ☐ Describe: _____
Photograph Taken? Photo # Yes ☒ No ☐ Describe: _____

Inner Appearance

Integrity of Well Casing Describe: good, intact
Integrity of Cap Seal Describe: good - plug
Surface Water in Casing? Yes ☐ No ☒ Describe: _____
Well Casing Diameter 4 inches
Well Casing Material PVC ☒ Steel ☐ Stainless Steel ☐
Inner Cap Threaded ☐ Slip ☐ Expansion Plug ☒ None ☐
Reference/Measuring Point Groove ☐ Indelible Mark ☒ None ☐
Evidence of Double Casing? Yes ☐ No ☒ Describe: _____

Downhole

Odor Yes ☐ No ☒ Describe: _____
PID Reading _____ ppm
Depth to Water (to top of casing) 2.82 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A ☐
Total Well Depth (to top of casing) 13.41 feet (nearest 0.1)
Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:



GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Omni-geotextiles PROJECT NUMBER: 00266404
DATE OF INSPECTION: 4/23/16 INSPECTOR: Pete Law
WELL DESIGNATION: MW-2R
WELL LOCATION: South adjacent to main building

Outward Appearance

Flushmount Diameter _____ inches N/A ☒
Approximate Stickup Height 2 feet N/A ☐
Integrity of Protective Casing Describe: Surface rust, otherwise good
Protective Casing Material Steel ☒ Stainless Steel ☐ Other _____
Protective Casing Width or Dia. 4 inches
Weep Hole in Protective Casing Yes ☐ No ☒
Surface Seal/Apron Material Cement ☒ Bentonite ☐ Not apparent ☐ Other _____
Integrity of Surface Seal/Apron Describe: _____
Surface Drainage Away from Wellhead ☒ Toward Wellhead ☐
Bollards Present? Yes ☐ No ☒ Describe: _____
Well ID. Visible? Yes ☐ No ☒ Describe: _____
Lock Present and Functional? Yes ☒ No ☐ Describe: _____
Photograph Taken? Photo # Yes ☐ No ☐ Describe: _____

Inner Appearance

Integrity of Well Casing Describe: Intact, good shape, no visible fractures/leakage
Integrity of Cap Seal Describe: Seals ~~are~~ must be but still effective
Surface Water in Casing? Yes ☒ No ☐ Describe: _____
Well Casing Diameter 2 inches
Well Casing Material PVC ☒ Steel ☐ Stainless Steel ☐
Inner Cap Threaded ☐ Slip ☐ Expansion Plug ☒ None ☐
Reference/Measuring Point Groove ☐ Indelible Mark ☒ None ☐
Evidence of Double Casing? Yes ☐ No ☐ Describe: _____

Downhole

Odor Yes ☐ No ☐ Describe: _____
PID Reading _____ ppm
Depth to Water (to top of casing) 2.42 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A ☐
Total Well Depth (to top of casing) 15.77 feet (nearest 0.1)
Sediment (Hard/Soft Bottom) Describe: Soft; sandy

Additional Comments:



GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Onwego Castings PROJECT NUMBER: 00266104
DATE OF INSPECTION: 4/23/15 INSPECTOR: BR
WELL DESIGNATION: MW-1 MW-5
WELL LOCATION: eastern portion of site

Outward Appearance

Flushmount Diameter _____ inches N/A [X]
Approximate Stickup Height ~2 feet N/A []
Integrity of Protective Casing Describe: Decent; Mod rusting but structurally sound
Protective Casing Material Steel [X] Stainless Steel [] Other _____
Protective Casing Width or Dia. 6 inches
Weep Hole in Protective Casing Yes [] No [X]
Surface Seal/Apron Material Cement [X] Bentonite [] Not apparent [] Other _____
Integrity of Surface Seal/Apron Describe: _____
Surface Drainage Away from Wellhead [X] Toward Wellhead []
Bollards Present? Yes [] No [X] Describe: _____
Well ID. Visible? Yes [X] No [] Describe: _____
Lock Present and Functional? Yes [X] No [] Describe: _____
Photograph Taken? Photo # Yes [X] No [] Describe: Don't see BG

Inner Appearance

Integrity of Well Casing Describe: Intact; exposed edges of cement seal due to seal erosion
Integrity of Cap Seal Describe: Good
Surface Water in Casing? Yes [X] No [] Describe: _____
Well Casing Diameter 3 inches
Well Casing Material PVC [X] Steel [] Stainless Steel []
Inner Cap Threaded [] Slip [] Expansion Plug [X] None []
Reference/Measuring Point Groove [] Indelible Mark [X] None []
Evidence of Double Casing? Yes [] No [] Describe: _____

Downhole

Odor Yes [] No [] Describe: _____
PID Reading _____ ppm
Depth to Water (to top of casing) 2.43 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A []
Total Well Depth (to top of casing) 17.31 feet (nearest 0.1)
Sediment (Hard/Soft Bottom) Describe: Hard; see BG notes for gauge data

Additional Comments:



GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: Omneso Castings PROJECT NUMBER: 00266404
DATE OF INSPECTION: 4/23/15 INSPECTOR: Pete Ryan
WELL DESIGNATION: MW-4
WELL LOCATION: central portion of site

Outward Appearance

Flushmount Diameter _____ inches N/A ☒
Approximate Stickup Height 2 feet N/A ☐
Integrity of Protective Casing Describe: Surface rust & slight bend
Protective Casing Material Steel ☒ Stainless Steel ☐ Other _____
Protective Casing Width or Dia. 6 inches
Weep Hole in Protective Casing Yes ☐ No ☒
Surface Seal/Apron Material Cement ☐ Bentonite ☐ Not apparent ☐ Other _____
Integrity of Surface Seal/Apron Describe: _____
Surface Drainage Away from Wellhead ☐ Toward Wellhead ☐
Bollards Present? Yes ☒ No ☐ Describe: Bollards are bent significantly
Well ID. Visible? Yes ☐ No ☐ Describe: _____
Lock Present and Functional? Yes ☐ No ☐ Describe: _____
Photograph Taken? Photo # Yes ☐ No ☐ Describe: _____

Inner Appearance

Integrity of Well Casing Describe: Green casing slightly bent touching steel pipe
Integrity of Cap Seal Describe: Green
Surface Water in Casing? Yes ☒ No ☐ Describe: _____
Well Casing Diameter 3 inches
Well Casing Material PVC ☒ Steel ☐ Stainless Steel ☐
Inner Cap Threaded ☐ Slip ☐ Expansion Plug ☒ None ☐
Reference/Measuring Point Groove ☐ Indelible Mark ☒ None ☐
Evidence of Double Casing? Yes ☐ No ☐ Describe: _____

Downhole

Odor Yes ☐ No ☒ Describe: _____
PID Reading _____ ppm
Depth to Water (to top of casing) 3.04 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A ☐
Total Well Depth (to top of casing) 16.42 feet (nearest 0.1)
Sediment (Hard/Soft Bottom) Describe: Soft bottom, sandy

Additional Comments:

See A6 notes for add'l well status details



GROUNDWATER MONITORING WELL INSPECTION

Oswego Castings

SITE/PROJECT NAME: PAU-502 PROJECT NUMBER: 00266404
DATE OF INSPECTION: 4/23/15 INSPECTOR: A. Goodrich
WELL DESIGNATION: MLW-5
WELL LOCATION: NW portion of site

Outward Appearance

Flushmount Diameter inches N/A ☒
Approximate Stickup Height ~3.5 feet N/A ☐
Integrity of Protective Casing Describe: good, intact, some rusting - but loose in ground
Protective Casing Material Steel ☒ Stainless Steel ☐ Other
Protective Casing Width or Dia. 4 inches
Weep Hole in Protective Casing Yes ☐ No ☐
Surface Seal/Apron Material Cement ☒ Bentonite ☐ Not apparent ☐ Other
Integrity of Surface Seal/Apron Describe: okay, but may be separated from ground
Surface Drainage Away from Wellhead ☒ Toward Wellhead ☐
Bollards Present? Yes ☐ No ☒ Describe:
Well ID. Visible? Yes ☐ No ☒ Describe:
Lock Present and Functional? Yes ☐ No ☒ Describe: replaced lock
Photograph Taken? Photo # Yes ☒ No ☐ Describe:

Inner Appearance

Integrity of Well Casing Describe: good, intact
Integrity of Cap Seal Describe: good - plug
Surface Water in Casing? Yes ☐ No ☒ Describe:
Well Casing Diameter 2 inches
Well Casing Material PVC ☒ Steel ☐ Stainless Steel ☐
Inner Cap Threaded ☐ Slip ☐ Expansion Plug ☒ None ☐
Reference/Measuring Point Groove ☐ Indelible Mark ☒ None ☐
Evidence of Double Casing? Yes ☐ No ☒ Describe:

Downhole

Odor Yes ☐ No ☒ Describe:
PID Reading ppm
Depth to Water (to top of casing) 4.88 feet (nearest 0.01) Depth to LNAPL feet (nearest 0.01) N/A ☐
Total Well Depth (to top of casing) 16.88 feet (nearest 0.1)
Sediment (Hard/Soft Bottom) Describe:

Additional Comments:



GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME:

Osiris Castings

PROJECT NUMBER:

06266404

DATE OF INSPECTION:

4/85

INSPECTOR:

Core Lynn

WELL DESIGNATION:

MW-6

WELL LOCATION:

eastern portion of site outside fence

Outward Appearance

Flushmount Diameter

_____ inches

N/A ☒

Approximate Stickup Height

2 feet

N/A ☐

Integrity of Protective Casing

Describe: _____

Protective Casing Material

Steel ☒

Stainless Steel ☐

Other _____

Protective Casing Width or Dia.

4 inches

Weep Hole in Protective Casing

Yes ☐

No ☒

Surface Seal/Apron Material

Cement ☒

Bentonite ☐

Not apparent ☐

Integrity of Surface Seal/Apron

Describe: _____

Surface Drainage

Away from Wellhead ☒

Toward Wellhead ☐

Bollards Present?

Yes ☐

No ☒

Describe: _____

Well ID. Visible?

Yes ☒

No ☐

Describe: _____

Lock Present and Functional?

Yes ☒

No ☐

Describe: _____

Photograph Taken? Photo #

Yes ☒

No ☐

Describe: sent to AG

Inner Appearance

Integrity of Well Casing

Describe: Good

Integrity of Cap Seal

Describe: Good

Surface Water in Casing?

Yes ☒

No ☐

Describe: _____

Well Casing Diameter

2 inches

Well Casing Material

PVC ☒

Steel ☐

Stainless Steel ☐

Inner Cap

Threaded ☐

Slip ☐

Expansion Plug ☒

None ☐

Reference/Measuring Point

Groove ☐

Indelible Mark ☒

None ☐

Evidence of Double Casing?

Yes ☐

No ☐

Describe: _____

Downhole

Odor

Yes ☐

No ☐

Describe: _____

PID Reading

— ppm

Depth to Water (to top of casing)

6.82 feet (nearest 0.01)

Depth to LNAPL

_____ feet (nearest 0.01) N/A ☐

Total Well Depth (to top of casing)

36.77 feet (nearest 0.1)

Sediment (Hard/Soft Bottom)

Describe: Hard see AG notes for add'l details

Additional Comments:

See AG notes for gauge data



GROUNDWATER MONITORING WELL INSPECTION

SITE/PROJECT NAME: oswego castings PROJECT NUMBER: 00066404
DATE OF INSPECTION: 4/23/15 INSPECTOR: A. Goodrich
WELL DESIGNATION: mw-7
WELL LOCATION: Northern portion of site

Outward Appearance

Flushmount Diameter 0.8 inches N/A ☒
Approximate Stickup Height 23 ~~22~~ feet N/A ☐
Integrity of Protective Casing Describe: good, intact, some rusting on outside
Protective Casing Material Steel ☒ Stainless Steel ☐ Other _____
Protective Casing Width or Dia. 4 inches
Weep Hole in Protective Casing Yes ☐ No ☒
Surface Seal/Apron Material Cement ☒ Bentonite ☐ Not apparent ☐ Other _____
Integrity of Surface Seal/Apron Describe: good, no cracks
Surface Drainage Away from Wellhead ☐ Toward Wellhead ☒
Bollards Present? Yes ☐ No ☒ Describe: _____
Well ID. Visible? Yes ☐ No ☒ Describe: _____
Lock Present and Functional? Yes ☒ No ☒ Describe: Put new lock on
Photograph Taken? Photo # Yes ☒ No ☐ Describe: _____

Inner Appearance

Integrity of Well Casing Describe: good, intact
Integrity of Cap Seal Describe: good - plug
Surface Water in Casing? Yes ☒ No ☐ Describe: _____
Well Casing Diameter 2 inches
Well Casing Material PVC ☒ Steel ☐ Stainless Steel ☐
Inner Cap Threaded ☐ Slip ☐ Expansion Plug ☒ None ☐
Reference/Measuring Point Groove ☐ Indelible Mark ☒ None ☐
Evidence of Double Casing? Yes ☐ No ☒ Describe: _____

Downhole

Odor Yes ☒? No ☐ Describe: Slight PCB odor?
PID Reading _____ ppm
Depth to Water (to top of casing) 2.70 feet (nearest 0.01) Depth to LNAPL _____ feet (nearest 0.01) N/A ☒
Total Well Depth (to top of casing) 16.09 feet (nearest 0.1)
Sediment (Hard/Soft Bottom) Describe: _____

Additional Comments:

APPENDIX D

Groundwater Level Data Form



GROUNDWATER LEVEL DATA FORM

PROJECT NAME: Oswego Castings
PROJECT NUMBER: 00266404.0000

DATE: 4/23/2015
NAME: ALG

[illegible]

Notes: NM - Not measured

APPENDIX E

Groundwater Sampling Purge Logs





WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-1

DATE: 4/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 17.41

B: Casing Internal Diameter: 4"

C: Water Level Below Top of Casing: 2.82

D: Volume of Water in Casing: 9.63

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1700	1705	1710	1715	1720	1725	1730					
Gallons	0.5	1.6	1.5	2.6	3.3	3.8	4.3					
Depth to Water (ft)	--	5.26	4.91	6.95	6.91	--	8.43					
pH	7.07	7.08	7.07	7.07	7.06	7.06	7.06					
Redox (mV)	104	104	101	101	99	99	100					
Conductivity (mS/cm)	0.776	0.775	0.771	0.765	0.765	0.764	0.763					
Turbidity (ntu)	0.0	1.0	0.1	0.0	0.0	0.0	0.0					
Dissolved Oxygen (mg/l)	1.43	1.34	1.3	1.19	1.16	1.16	1.17					
Temperature (°C)	6.09	6.13	6.24	6.51	6.5	6.5	6.48					
Salinity (ppt)	0.40	0.40	0.40	0.40	0.40	0.40	0.40					

Notes: Spooled out poly tubing with PDB weight fixed to well. Left suspended 2' off bottom.

Sample collected at 1740 for PCBs



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-2R

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 15.77

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 2.42

D: Volume of Water in Casing: 2.27

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1528	1535	1540	1545	1550	1555	1600	1605	1610	1615	1620	1625
Gallons	--	--	--	--	--	--	--	--	--	--	--	--
Depth to Water (ft)	6.77	7.76	8.49	9.08	9.9	10.37	11.07	11.84	12.25	13.67	13.21	14.42
pH	7.34	7.32	7.31	7.30	7.31	7.31	7.31	7.32	7.31	7.31	7.31	7.31
Redox (mV)	105	116	111	114	114	112	110	100	101	98	83	94
Conductivity (mS/cm)	0.798	0.806	0.806	0.802	0.793	0.786	0.783	0.79	0.791	0.790	0.790	0.79
Turbidity (ntu)	7.1	5.5	0.5	2.5	1.0	1.1	5.2	11.7	53.4	27.8	28.3	27.8
Dissolved Oxygen (mg/l)	2.31	4.81	5.10	3.23	1.53	0.98	0.91	0.83	1.26	0.67	1.01	0.84
Temperature (°C)	5.97	5.99	5.99	5.89	5.85	5.83	5.82	5.81	5.74	5.76	5.8	5.76
Salinity (ppt)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
TDS (g/L)	0.520	0.516	0.516	0.512	0.507	0.503	0.501	0.505	0.507	0.506	0.505	0.505

Notes: Begin purging at 1515, ceased at 1520 to adjust tubing, resumed at 1523.

No gallon pump rate due to crack in bucket bottom. Pump rate held

constant throughout well development.

At 1610 turbidity reveals 53.4 NTU's but appears clear. Malfunction?

At 1620 turbidity lowered & acceptable range held

AT 1625 DO still fluctuating; starting collecting sample due to dropping DTW

even though DO still borderline.



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-3

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 17.31

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 2.43

D: Volume of Water in Casing: 2.53

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1115	1120	1125	1130	1135	1140	1145	1150				
Gallons	0.5	1.5	2.25	3.0	3.25	3.75	4.5	5.0				
Depth to Water (ft)	3.35	4.50	5.54	6.05	6.40	6.67	6.97	7.24				
pH	6.64	6.85	6.91	6.93	6.93	6.93	6.93	6.93				
Redox (mV)	122	108	96	91	88	91	88	89				
Conductivity (mS/cm)	0.677	0.675	0.674	0.672	0.671	0.671	0.671	0.672				
Turbidity (ntu)	34.0	25.8	15.5	12.2	21.9	9.3	9.8	9.6				
Dissolved Oxygen (mg/l)	1.40	6.28	1.22	1.25	1.27	2.00	1.98	1.88				
Temperature (°C)	6.87	6.80	6.73	6.72	6.69	6.72	6.71	6.74				
Salinity (ppt)												
TDS (g/L)												

Notes: Begin pumping MW-3 at 1111

Change pump rate at 1120 to match recharge rate.



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-4

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 16.42

B: Casing Internal Diameter: 4"

C: Water Level Below Top of Casing: 3.04

D: Volume of Water in Casing: 8.83

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1340	1345	1350	1355	1400							
Gallons	0.5	0.75	1.25	2.0	2.5							
Depth to Water (ft)	--	3.97	4.84	5.8	6.55							
pH	7.28	7.27	7.27	7.26	7.27							
Redox (mV)	94	95	97	100	102							
Conductivity (mS/cm)	0.765	0.764	0.765	0.764	0.765							
Turbidity (ntu)	0.0	0.0	0.0	0.0	0.0							
Dissolved Oxygen (mg/l)	3.16	3.02	2.92	2.87	2.87							
Temperature (°C)	6.14	6.15	6.15	6.14	6.08							
Salinity (ppt)	0.4	0.4	0.4	0.4	0.4							
TDS (g/L)	0.489	0.489	0.489	0.489	0.489							

Notes: Begin pumping at 1335; used PDB weight at bottom of poly tubing.

Collecting DUP-X on this well.

Collected MW-4 at 1400

Collected DUP-X at 1410



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-5

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 16.88

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 4.88

D: Volume of Water in Casing: 2.04

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1510	1515	1525	1530	1535	1540	1545	1550	1555	1605	1610	1615
Gallons	0.6	1.0	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
Depth to Water (ft)	7.24	7.51	8.48	8.82	9.28	9.78	10.22	10.86	11.12	12.09	12.53	12.98
pH	6.93	6.95	7.01	6.99	6.99	6.97	6.95	6.93	6.91	6.90	6.9	6.92
Conductivity (mS/cm)	0.999	0.919	0.851	0.86	0.869	0.876	0.913	0.925	0.963	0.999	1.03	1.04
Turbidity (ntu)	18.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dissolved Oxygen (mg/l)	4.66	5.71	5.55	5.58	5.67	5.72	6.51	6.6	5.8	3.95	3.28	2.91
Temperature (°C)	9.03	9.03	9.09	9.11	9.10	9.07	9.03	8.96	8.94	8.84	8.82	8.80
Salinity (ppt)	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
TDS (g/L)	0.639	0.585	0.545	0.551	0.556	0.561	0.586	0.591	0.616	0.653	0.663	0.665
Redox (mV)	-131	-129	-128	-126	-124	-121	-117	-111	-110	-118	-121	-124

Notes: Purge initiated at 1502

Turned rate up at 1516 and 1532. Horiba shut off at 1600 and 1630.

Sample collected at 1645 for PCBs



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-5 (continued)

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 16.88

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 4.88

D: Volume of Water in Casing: 2.04

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1620	1625	1635	1640								
Gallons	7.0	7.5	8.5	9.0								
Depth to Water (ft)	13.35	13.98	14.67	15.25								
pH	6.92	6.95	6.94	6.93								
Conductivity (mS/cm)	1.02	1.02	1.02	1.02								
Turbidity (ntu)	2.63	2.05	0.0	0.0								
Dissolved Oxygen (mg/l)	0.654	0.650	0.652	0.650								
Temperature (°C)	8.79	8.78	8.81	8.85								
Salinity (ppt)	0.5	0.5	0.5	0.5								
TDS (g/L)	0.654	0.650	0.652	0.650								
Redox (mV)	-126	-132	-131	-130								

Notes: Purge initiated at 1502

Turned rate up at 1516 and 1532. Horiba shut off at 1600 and 1630.

Sample collected at 1645 for PCBs



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-6

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 36.77

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 6.82

D: Volume of Water in Casing: 5.09

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1240	1245	1250	1255								
Gallons	0.25	1.0	1.5	2.0								
Depth to Water (ft)	--	--	--	--								
pH	7.59	7.63	7.64	7.64								
Conductivity (mS/cm)	0.648	0.645	0.645	0.642								
Turbidity (ntu)	1.4	1.10	0.0	0.0								
Dissolved Oxygen (mg/l)	2.71	2.65	2.61	2.60								
Temperature (°C)	7.64	7.52	7.49	7.42								
Salinity (ppt)	0.3	0.3	0.3	0.3								
TDS (g/L)	0.414	0.413	0.412	0.410								
Redox (mV)	80	85	82	80								

Notes: Began purging at 1230

Pumped at 50% speed

Collected sample at 1255



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-7

DATE: 04/23/2015

PROJECT NAME: Oswego Castings

PROJECT NUMBER: 00266404.0000

SAMPLERS: PR/AG

A: Total Casing and Screen Length: 16.09

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 2.70

D: Volume of Water in Casing: 2.28

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED										
Time	1332	1337	1342	1347	1352	1359	1404	1409	1414	1419	
Gallons	0.6	1.3	2.3	2.8	6.8	4.8	5.3	5.9	6.5	7.1	
Depth to Water (ft)	6.44	6.44	7.18	7.67	8.66	9.38	10.10	10.72	11.27	11.71	
pH	6.85	6.80	6.77	6.81	6.71	6.69	6.81	6.83	6.83	6.87	
Conductivity (mS/cm)	1.52	1.52	1.52	1.52	1.52	1.52	1.51	1.51	1.51	1.50	
Turbidity (ntu)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Dissolved Oxygen (mg/l)	3.55	3.05	2.71	2.55	2.53	2.22	2.07	1.96	1.90	1.86	
Temperature (°C)	8.85	8.93	8.99	8.91	8.70	8.54	8.45	8.37	8.37	8.36	
Salinity (ppt)	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	
TDS (g/L)	0.973	0.973	0.970	0.972	0.976	0.971	0.969	0.965	0.966	0.957	
Redox (mV)	-176	-184	-176	-177	-173	-175	-183	-183	-183	-183	

Notes: Purge initiated at 1327

Water initially purge some black sediment

Sample collected at 1425 for PCBs

MS/MSD collected

APPENDIX F

Analytical Data Packages



Report Date:
15-May-15 06:45



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

ARCADIS U.S., Inc.
855 Route 146
Suite 210
Clifton Park, NY 12065

Work Order: P0667
Project : Oswego Castings
Project #:

Attn: Stefan Bagnato

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
P0667-01	MW-4	Aqueous	23-Apr-15 14:00	25-Apr-15 11:00
P0667-02	DUP-X	Aqueous	23-Apr-15 00:00	25-Apr-15 11:00
P0667-03	MW-6	Aqueous	23-Apr-15 12:55	25-Apr-15 11:00
P0667-04	MW-2R	Aqueous	23-Apr-15 16:25	25-Apr-15 11:00
P0667-05	MW-3	Aqueous	23-Apr-15 11:50	25-Apr-15 11:00
P0667-06	MW-1	Aqueous	23-Apr-15 17:40	25-Apr-15 11:00
P0667-07	MW-5	Aqueous	23-Apr-15 16:45	25-Apr-15 11:00
P0667-08	MW-7	Aqueous	23-Apr-15 14:25	25-Apr-15 11:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Oswego Castings

SDG : P0667

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-4	P0667-01			SW8082_W		
DUP-X	P0667-02			SW8082_W		
MW-6	P0667-03			SW8082_W		
MW-2R	P0667-04			SW8082_W		
MW-3	P0667-05			SW8082_W		
MW-1	P0667-06			SW8082_W		
MW-5	P0667-07			SW8082_W		
MW-7	P0667-08			SW8082_W		

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary GC*

Project Name : Oswego Castings

SDG : P0667

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_W					
P0667-01A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-02A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-03A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-04A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-05A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-06A	AQ	SW8082_W	3510C	Acid/Sulfur	100
P0667-07A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-08A	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-08AMS	AQ	SW8082_W	3510C	Acid/Sulfur	1
P0667-08AMSD	AQ	SW8082_W	3510C	Acid/Sulfur	1

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary GC*

Project Name : Oswego Castings

SDG : P0667

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_W					
P0667-01A	AQ	4/23/2015	4/25/2015	4/29/2015	5/7/2015
P0667-02A	AQ	4/23/2015	4/25/2015	4/29/2015	5/7/2015
P0667-03A	AQ	4/23/2015	4/25/2015	4/29/2015	5/7/2015
P0667-04A	AQ	4/23/2015	4/25/2015	4/29/2015	5/7/2015
P0667-05A	AQ	4/23/2015	4/25/2015	4/29/2015	5/8/2015
P0667-06A	AQ	4/23/2015	4/25/2015	4/29/2015	5/13/2015
P0667-07A	AQ	4/23/2015	4/25/2015	4/29/2015	5/8/2015
P0667-08A	AQ	4/23/2015	4/25/2015	4/29/2015	5/8/2015
P0667-08AMS	AQ	4/23/2015	4/25/2015	4/29/2015	5/8/2015
P0667-08AMSD	AQ	4/23/2015	4/25/2015	4/29/2015	5/8/2015

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: P0667

Client ID: ARCADIS_CLIFTONPARK

Project: Oswego Castings

WO Name: Oswego Castings

Location: ARCADIS_OSWEGO,

Comments: N/A

Case:

SDG:

HC Due: 05/14/15

Fax Due:

Fax Report: ☐

Report Level:

Special Program:

EDD: CLF

EQUIS_4_NYSDEC_v3

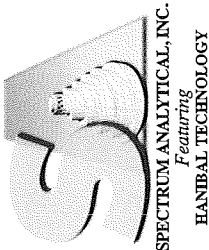
PO: 00266404.0000

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
P0667-01A	MW-4	04/23/2015 14:00	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-02A	DUP-X	04/23/2015 00:00	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-03A	MW-6	04/23/2015 12:55	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-04A	MW-2R	04/23/2015 16:25	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-05A	MW-3	04/23/2015 11:50	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-06A	MW-1	04/23/2015 17:40	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-07A	MW-5	04/23/2015 16:45	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL				Y	H4
P0667-08A	MW-7	04/23/2015 14:25	04/25/2015	Aqueous	SW8082_W	/ +AR1262, 1268, 6-level ICAL		Y	Y	Y	H4

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation



CHAIN OF CUSTODY RECORD

☐ 11 A Imgren Drive
Agawam, MA 01001
(413) 789-9018

☒ 8405 Benjamin Road, Ste A
N Kingstown, RI 02852
(401) 732-3400

Page 2 of 2

Special Handling:

TAT- Ind icate Date Needed: _____
· All TATs subject to laboratory approval.
· Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: Jeremy Wyckoff
855 Route 146 Suite 210
Clifton Park NY 12065

Telephone #: 518-250-7300
Project Mgr. _____

Invoice To: Accounts Payable
630 Plaza Dr #100
Highland Park, CO 80808

P.O. No.: 60266404 RQN: _____

Project No.: 00266404
Site Name: Oswego Castings
Location: Oswego State: NY
Sampler(s): A. Gauduchon, P. Ryan

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= _____ 12= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

List preservative code below:

QA/QC Reporting Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other LOUIS

Matrix

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type
06	MW-1	4/23/15	17:40	G
07	MW-5	4/23/15	16:45	↓
08	MW-7	4/23/15	14:25	↓
08	MW-7-MS	4/23/15	14:25	↓
08	MW-7-MSD	4/23/15	14:25	↓

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Relinquished by:

Received by:

Temp°C

EDD Format

Andrew Aronin
FedEx

FedEx
[Signature]

Date: 4/24/15 Time: 15:00
6/25/15 11:00

2.8°C
3.6°C

E-mail to jeremy.wyckoff@castings-us.com

Condition upon receipt: Custody Seals: ☒ Present ☒ Intact ☐ Broken
☐ Ambient ☒ Ice ☐ Refrigerated ☐ D/VOA Frozen ☐ Soil Jar Frozen

Received By: <u>WJL</u>		Page 01 of 00	
Reviewed By: <u>RP</u>		Log-in Date 04/25/2015	
Work Order: P0667		Client Name: ARCADIS U.S., Inc.	
Project Name/Event: Oswego Castings			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

	Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
		HNO3	H2SO4	HCl	NaOH	H3PO4		
1. Custody Seal(s) <u>Present / Absent</u>	P0667-01							
<u>Intact / Broken</u>	P0667-02							
2. Custody Seal Nos. <u>N/A</u>	P0667-03							
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists <u>Present / Absent</u>	P0667-04							
	P0667-05							
	P0667-06							
	P0667-07							
4. Airbill <u>AirBill / Sticker</u> <u>Present / Absent</u>	P0667-08							
5. Airbill No. FedEx 8063 0137 8515								
6. Sample Tags <u>Present / Absent</u> Sample Tag Numbers <u>Listed /</u> <u>Not Listed on Chain-of-Custody</u>								
7. Sample Condition <u>Intact / Broken /</u> <u>Leaking</u>								
8. Cooler Temperature Indicator Bottle <u>Present / Absent</u>								
9. Cooler Temperature		3.6 °C						
10. Does information on TR/COCs and sample tags agree?		<u>Yes / No</u>						
11. Date Received at Laboratory		04/25/2015						
12. Time Received		11:00						
Sample Transfer								
Fraction (1) TVOA/VOA		Fraction (2) SVOA/PEST/ARO						
Area #		Area #						
By		By						
On		On						
IR Temp Gun ID: MT-74		VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze See Sample Condition Notification/Corrective Action Form Yes / <u>No</u> Rad OK <u>Yes</u> / No						
Coolant Condition: ICE								
Preservative Name/Lot No:								



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** PCB Organics ***

REPORT NARRATIVE

Spectrum Analytical, Inc. RI Division.

Client : ARCADIS U.S., Inc.

Project: Oswego Castings

Laboratory Workorder / SDG #: P0667

SW846 8082A, PCB by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 8082A

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510C

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E2
Instrument Type: GC-ECD
Description: HP5890 II +
Manufacturer: Hewlett-Packard

Model: 5890

GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

MW-3 (P0667-05A), recovery is below criteria for Decachlorobiphenyl on rear column at 38% with criteria of (40-135) and Decachlorobiphenyl on front column at 31% with criteria of (40-135).

MW-1 (P0667-06A) Surrogate outside of QC limit due to dilution, recovery is below criteria for Decachlorobiphenyl on rear column at 0% with criteria of (40-135), Decachlorobiphenyl on front column at 0% with criteria of (40-135), Tetrachloro-m-xylene on rear column at 0% with criteria of (34-137) and Tetrachloro-m-xylene on front column at 0% with criteria of (34-137).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spikes were performed on samples: MW-7 (P0667-08AMS) and MW-7 (P0667-08AMSD).

Percent recoveries were within the QC limits with the following exceptions:

Replicate RPDs were within the advisory QC limits with the exception of the following:

MW-7 (P0667-08AMSD), Relative Percent Difference is greater than RPD limit for Aroclor-1016 on front column.

E. Dilutions:

The following samples were analyzed at dilution:

MW-1 (P0667-06A) : Dilution Factor: 100

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

G. Manual Integration

No sample in this SDG were performed with manual integration.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.', is written over a horizontal line.

Signed:_____

Date:_____5/14/2015_____



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Data Flag/Qualifiers (Page 1 of 2):

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as an aldol condensation by-product.



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Data Flag/Qualifiers (Page 2 of 2):

- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.

- L NYSDEC qualifier: Result is biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

2Q - FORM II ARO-1
WATER AROCLOR SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-81958	78	85	68	79			0
02	LCS-81958	91	100	74	91			0
03	MW-4	75	82	57	69			0
04	DUP-X	67	73	54	67			0
05	MW-6	84	94	64	82			0
06	MW-2R	71	78	54	65			0
07	MW-3	56	61	31 *	38 *			2
08	MW-5	84	94	59	79			0
09	MW-7	82	92	67	86			0
10	MW-7MS	67	74	54	69			0
11	MW-7MSD	76	86	55	71			0
12	MW-1	0 D	0 D	0 D	0 D			4

QC LIMITS
(34-137)
(40-135)

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate diluted out

som14.10.02.1616

3J - FORM III ARO-1
WATER AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix Spike - EPA Sample No.: MW-7

Instrument ID: E2 GC Column : CLPPest ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
AR1016	0.4000	0.0000	0.5167	129		25-145
AR1260	0.4000	0.0000	0.3013	75		30-145

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
AR1016	0.4000	0.3809	95		30		0-30	25-145
AR1260	0.4000	0.3403	85		12		0-30	30-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

3J - FORM III ARO-1
WATER AROCLOR MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix Spike - EPA Sample No.: MW-7

Instrument ID: E2 GC Column : CLPPestII ID: 0.53 (mm)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
AR1016	0.4000	0.0000	0.4253	106		25-145
AR1260	0.4000	0.0000	0.3154	79		30-145

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
AR1016	0.4000	0.4049	101		5		0-30	25-145
AR1260	0.4000	0.3708	93		16		0-30	30-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-81958

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab Sample ID: LCS-81958 LCS Lot No.: a094177
Date Extracted: 04/29/2015 Date Analyzed (1): 05/07/2015
Instrument ID (1): E2 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	0.4000	0.4005	100	25-145
Aroclor-1260	0.4000	0.3803	95	30-145

Instrument ID (2): E2 GC Column(2): CLPPestII ID: 0.53 (mm)
Date Analyzed (2): 05/07/2015

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	0.4000	0.3703	93	25-145
Aroclor-1260	0.4000	0.3670	92	30-145

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

4F - FORM IV ARO
AROCOLOR METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-81958

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab File ID: E2P0152F.D / E2P0152R.D Lab Sample ID: MB-81958
Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 04/29/2015
Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N
Acid Cleanup: (Y/N) Y
Date Analyzed (1): 05/07/2015 Date Analyzed (2): 05/07/2015
Time Analyzed (1): 22:39 Time Analyzed (2): 22:39
Instrument ID (1): E2 Instrument ID (2): E2
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-81958	LCS-81958	05/07/2015	05/07/2015
02	MW-4	P0667-01A	05/07/2015	05/07/2015
03	DUP-X	P0667-02A	05/07/2015	05/07/2015
04	MW-6	P0667-03A	05/07/2015	05/07/2015
05	MW-2R	P0667-04A	05/07/2015	05/07/2015
06	MW-3	P0667-05A	05/08/2015	05/08/2015
07	MW-5	P0667-07A	05/08/2015	05/08/2015
08	MW-7	P0667-08A	05/08/2015	05/08/2015
09	MW-7MS	P0667-08AMS	05/08/2015	05/08/2015
10	MW-7MSD	P0667-08AMSD	05/08/2015	05/08/2015
11	MW-1	P0667-06A	05/13/2015	05/13/2015

COMMENTS:

1H - FORM I ARO
AROCOLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0154F.D/E2P0154R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.56	
11097-69-1	Aroclor-1254	0.13	P
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0154F.D
 Lab Smp Id: P0667-01A Client Smp ID: MW-4
 Inj Date : 07-MAY-2015 23:08
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-01A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 32
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8							
2.937	2.936	0.001	34607	0.04477	0.045		

7 Aroclor-1248 CAS #: 12672-29-6							
6.073	6.070	0.003	10570	0.65042	0.65	80.00- 120.00	100.00
6.335	6.334	0.001	9388	0.58186	0.58	69.73- 109.73	88.82
6.800	6.802	-0.002	6092	0.57507	0.58	34.63- 74.63	57.63
Average of Peak Concentrations =					0.60		

8 Aroclor-1254 CAS #: 11097-69-1							
6.800	6.799	0.001	6092	0.18516	0.18	80.00- 120.00	100.00(H)
6.923	6.918	0.005	3043	0.23090	0.23	18.25- 58.25	49.95
7.107	7.105	0.002	3760	0.22747	0.23	35.49- 75.49	61.72
Average of Peak Concentrations =					0.21		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3							
9.241	9.241	0.000	1609711	0.06835	0.068		

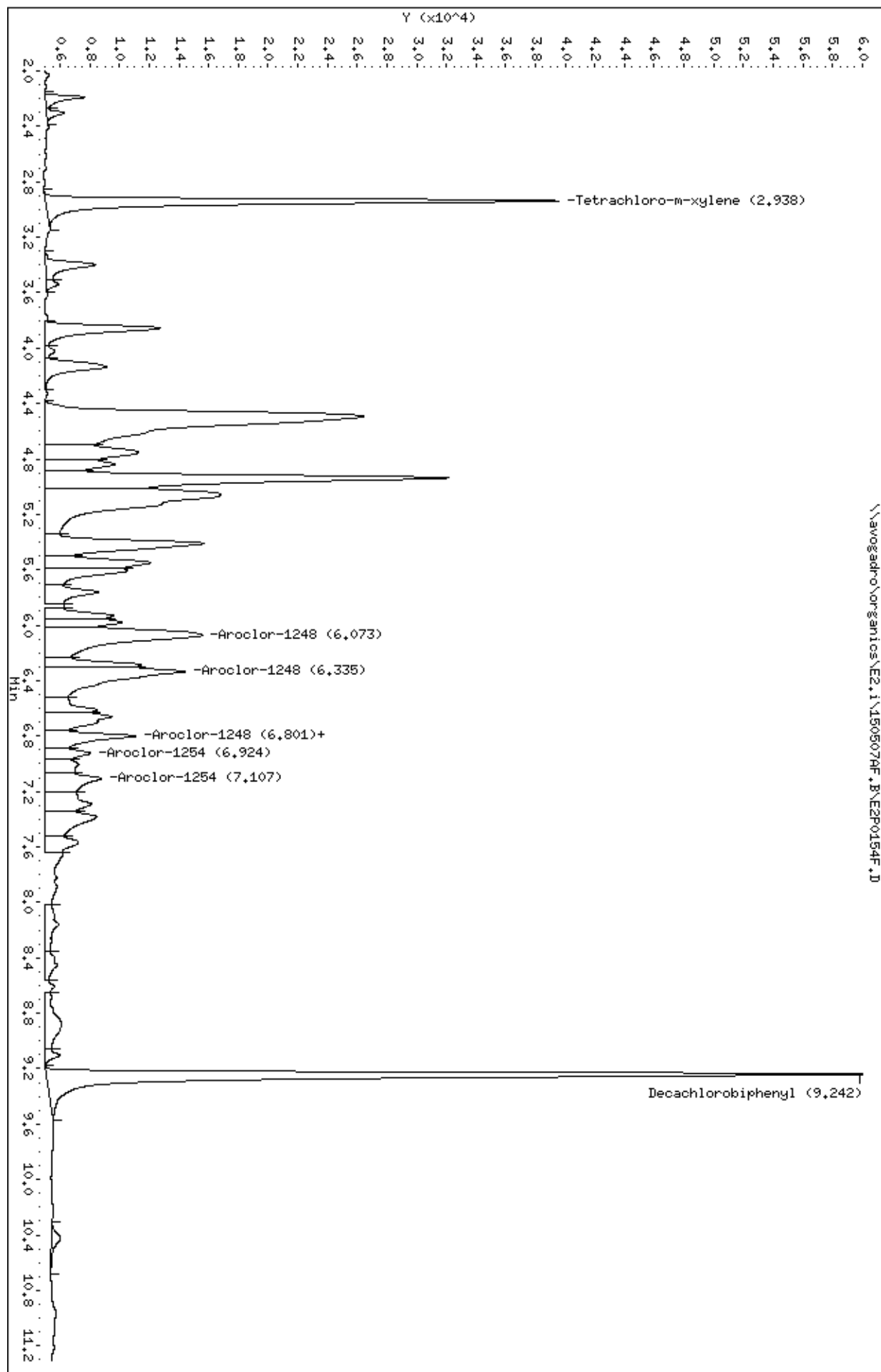
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0154F.D
Report Date: 11-May-2015 15:42

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0154F.D
Date : 07-MAY-2015 23:08
Client ID: MM-4
Sample Info: P0667-01A,,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0154R.D
Lab Smp Id: P0667-01A Client Smp ID: MW-4
Inj Date : 07-MAY-2015 23:08
Operator : JW SRC: LIMS Inst ID: E2.i
Smp Info : P0667-01A,,81958,8082A.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8							
3.623	3.623	0.000	27907 0.04929	0.049			

5 Aroclor-1248				CAS #: 12672-29-6			
7.044	7.044	0.000	3586 0.63578	0.64	80.00- 120.00	100.00	
7.158	7.156	0.002	9705 0.54533	0.54	305.09- 345.09	270.64	
7.795	7.794	0.001	4461 0.50887	0.51	133.79- 173.79	124.40	
Average of Peak Concentrations =				0.56			

7 Aroclor-1254				CAS #: 11097-69-1			
7.686	7.684	0.002	3008 0.18785	0.19	80.00- 120.00	100.00(H)	
7.959	7.968	-0.009	1830 0.09809	0.098	88.83- 128.83	60.84	
8.304	8.291	0.013	1445 0.09356	0.094	73.31- 113.31	48.04	
Average of Peak Concentrations =				0.13			

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
10.228	10.227	0.001	39225 0.08292	0.083			

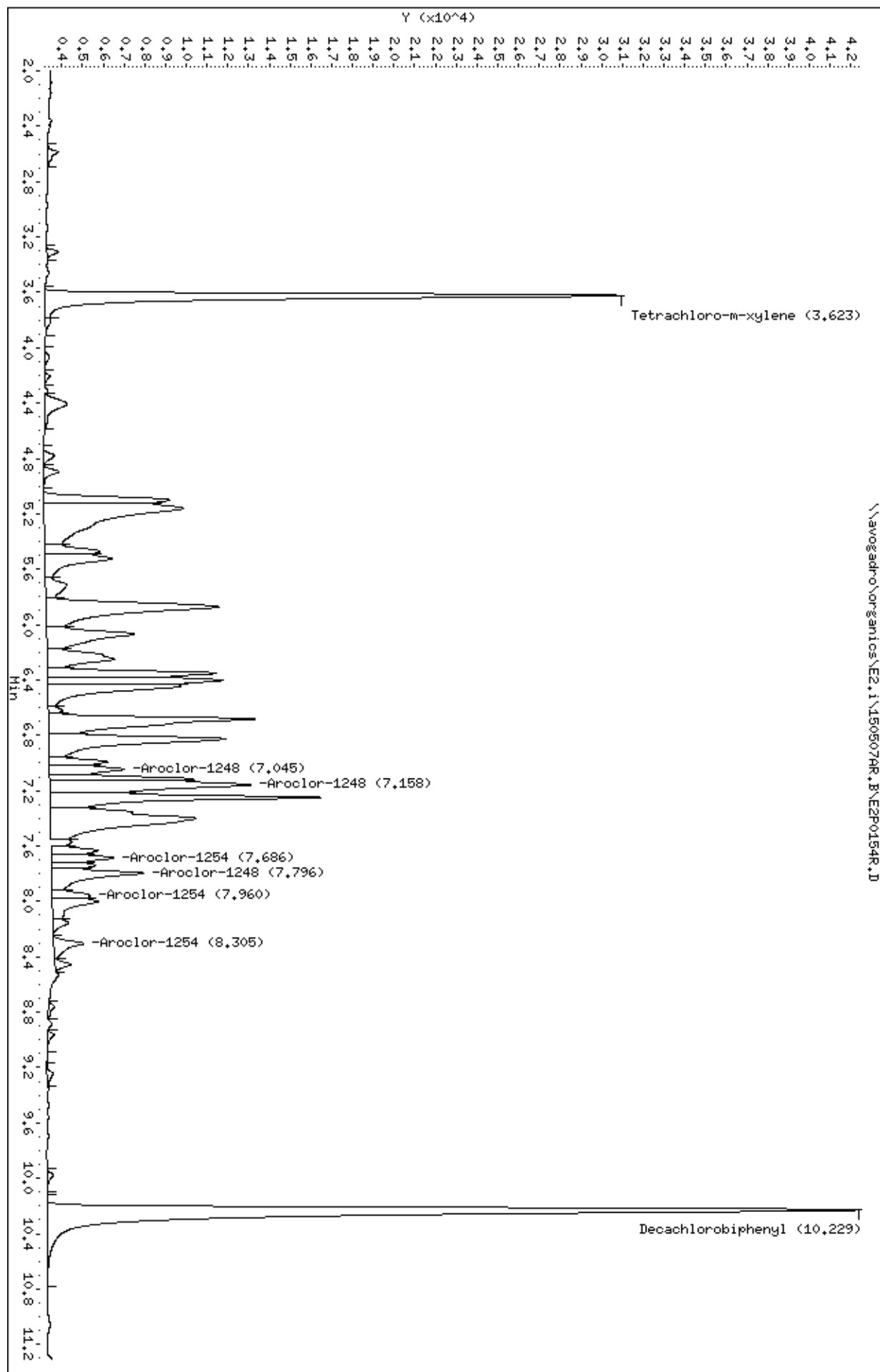
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0154R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0154R.D
 Date : 07-MAY-2015 23:08
 Client ID: MM-4
 Sample Info: P0667-01A,,81958,8082A,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPestII

Instrument: E2,i
 Operator: JM SRC: LIMS
 Column diameter: 0.32



1H - FORM I ARO
AROCOLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-X

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-02A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0155F.D/E2P0155R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.46	
11097-69-1	Aroclor-1254	0.10	
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0155F.D
 Lab Smp Id: P0667-02A Client Smp ID: DUP-X
 Inj Date : 07-MAY-2015 23:23
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-02A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 33
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (ng)	ON-COL FINAL (ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.937	2.936	0.001	31074 0.04020	0.040		

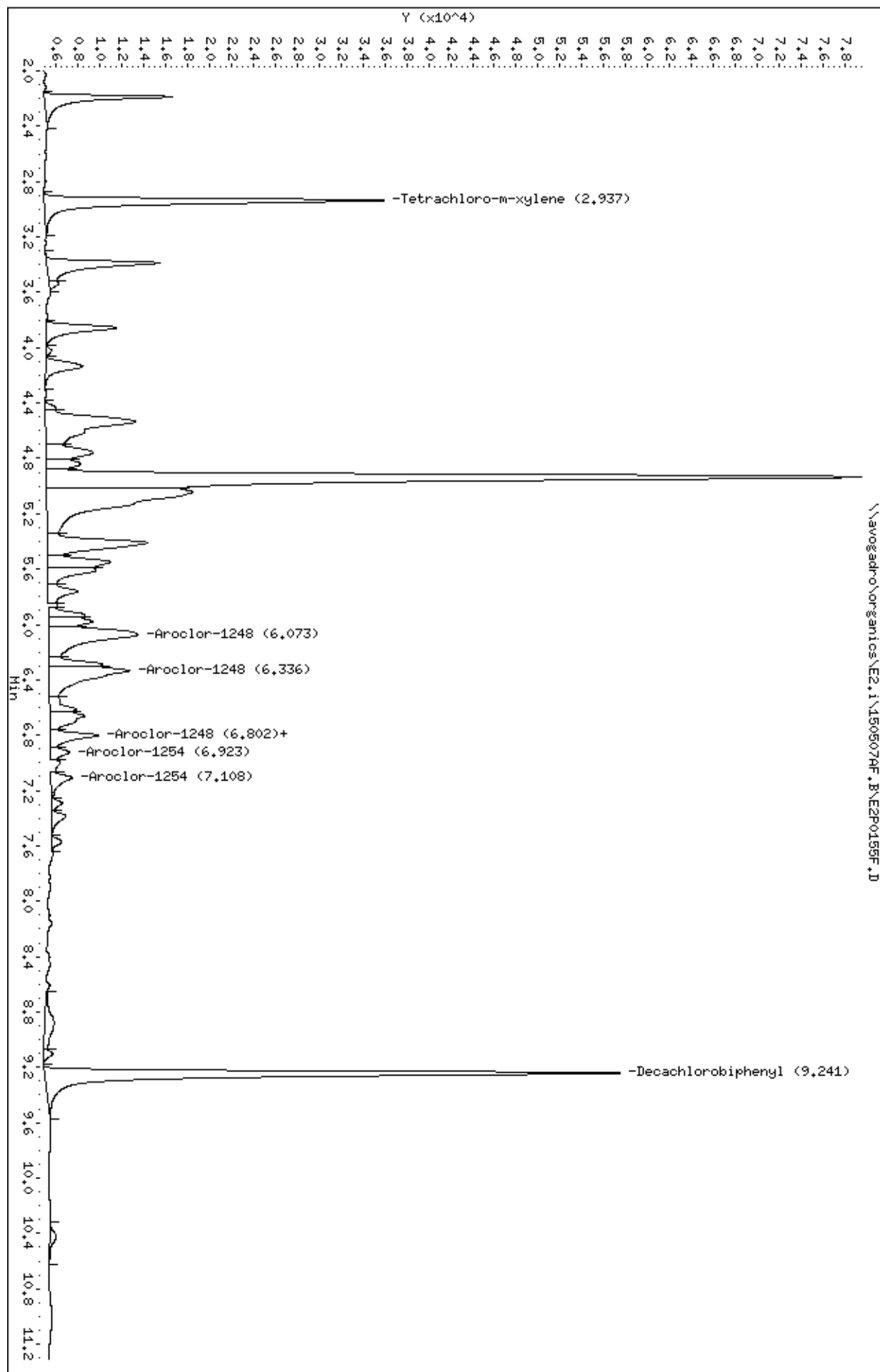
7 Aroclor-1248 CAS #: 12672-29-6						
6.073	6.070	0.003	8148 0.50139	0.50	80.00- 120.00	100.00
6.335	6.334	0.001	7327 0.45412	0.45	69.73- 109.73	89.92
6.801	6.802	-0.001	4438 0.41893	0.42	34.63- 74.63	54.47
Average of Peak Concentrations =				0.46		

8 Aroclor-1254 CAS #: 11097-69-1						
6.801	6.799	0.002	4438 0.13489	0.13	80.00- 120.00	100.00
6.923	6.918	0.005	1745 0.13241	0.13	18.25- 58.25	39.32
7.107	7.105	0.002	1942 0.11749	0.12	35.49- 75.49	43.76
Average of Peak Concentrations =				0.13		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.240	9.241	-0.001	1538963 0.06535	0.065		

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0155F.D
Date : 07-MAY-2015 23:23
Client ID: DUP-X
Sample Info: P0667-02H,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0155R.D
 Lab Smp Id: P0667-02A Client Smp ID: DUP-X
 Inj Date : 07-MAY-2015 23:23
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-02A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 33
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	24793	0.04379	0.044			

5 Aroclor-1248					CAS #: 12672-29-6			
7.045	7.044	0.001	2952	0.52338	0.52	80.00-	120.00	100.00
7.158	7.156	0.002	8004	0.44975	0.45	305.09-	345.09	271.14
7.796	7.794	0.002	3667	0.41830	0.42	133.79-	173.79	124.22
Average of Peak Concentrations =					0.46			

7 Aroclor-1254					CAS #: 11097-69-1			
7.686	7.684	0.002	2485	0.15519	0.16	80.00-	120.00	100.00(H)
7.959	7.968	-0.009	1485	0.07959	0.080	88.83-	128.83	59.76
8.305	8.291	0.014	1150	0.07446	0.074	73.31-	113.31	46.28
Average of Peak Concentrations =					0.10			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.228	10.227	0.001	37834	0.07998	0.080			

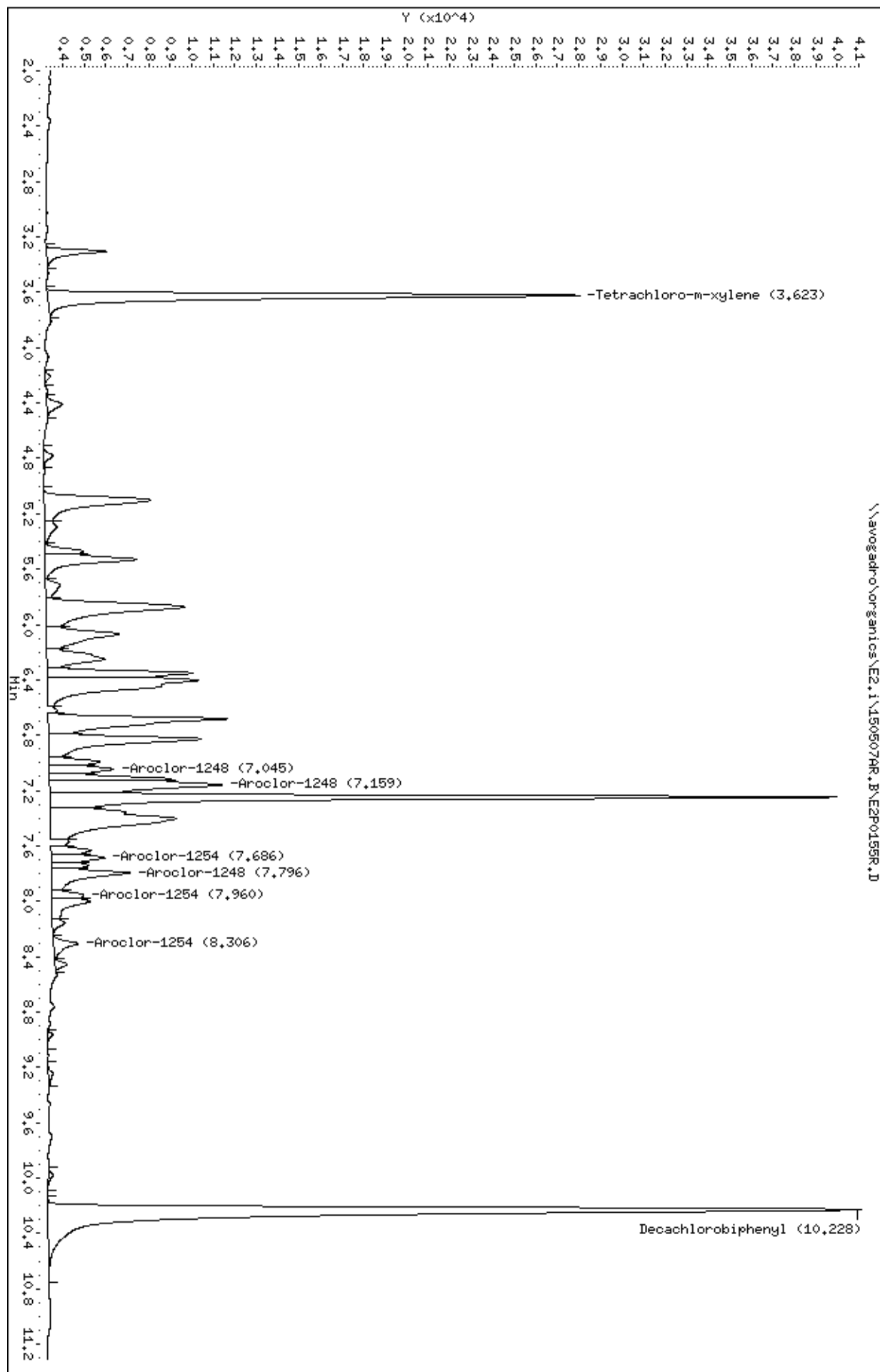
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0155R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0155R.D
Date : 07-MAY-2015 23:23
Client ID: DUP-X
Sample Info: P0667-02H,81958,8082H,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-03A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0156F.D/E2P0156R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0156F.D
 Lab Smp Id: P0667-03A Client Smp ID: MW-6
 Inj Date : 07-MAY-2015 23:37
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-03A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 34
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

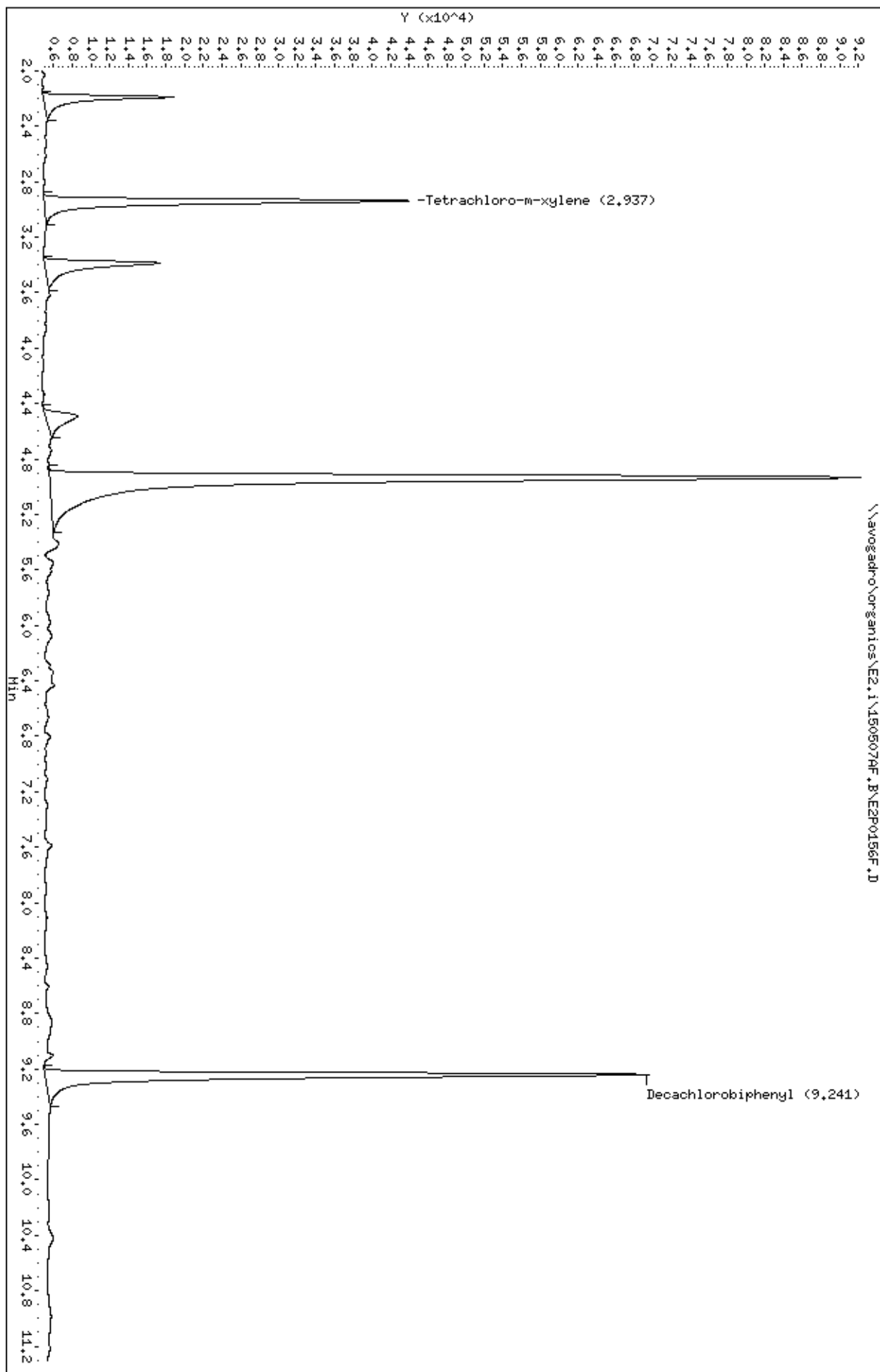
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	39085 0.05057	0.050		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.240	9.241	-0.001	1811621 0.07693	0.077		

Data File: \\avogadro\organics\E2,i\150507HF.B\E2P0156F.D
Date : 07-MAY-2015 23:37
Client ID: MM-6
Sample Info: P0667-03A, 81958, 8082A, sub.,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0156R.D
 Lab Smp Id: P0667-03A Client Smp ID: MW-6
 Inj Date : 07-MAY-2015 23:37
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-03A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 34
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

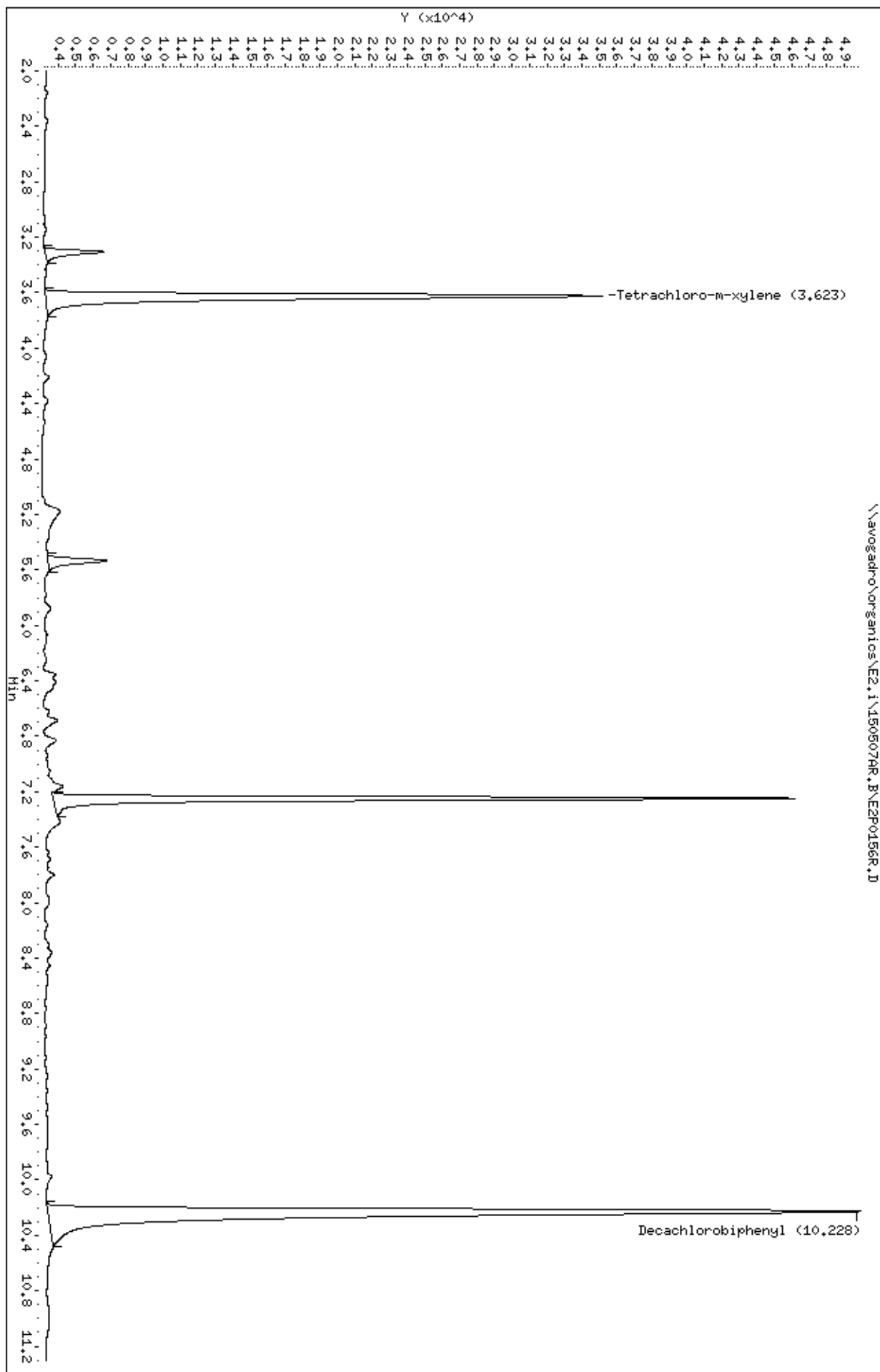
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	31894 0.05633	0.056		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.227	10.227	0.000	46551 0.09840	0.098		

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0156R.D
Date : 07-MAY-2015 23:37
Client ID: MM-6
Sample Info: P0667-03A,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0157F.D/E2P0157R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0157F.D
 Lab Smp Id: P0667-04A Client Smp ID: MW-2R
 Inj Date : 07-MAY-2015 23:52
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-04A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 35
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

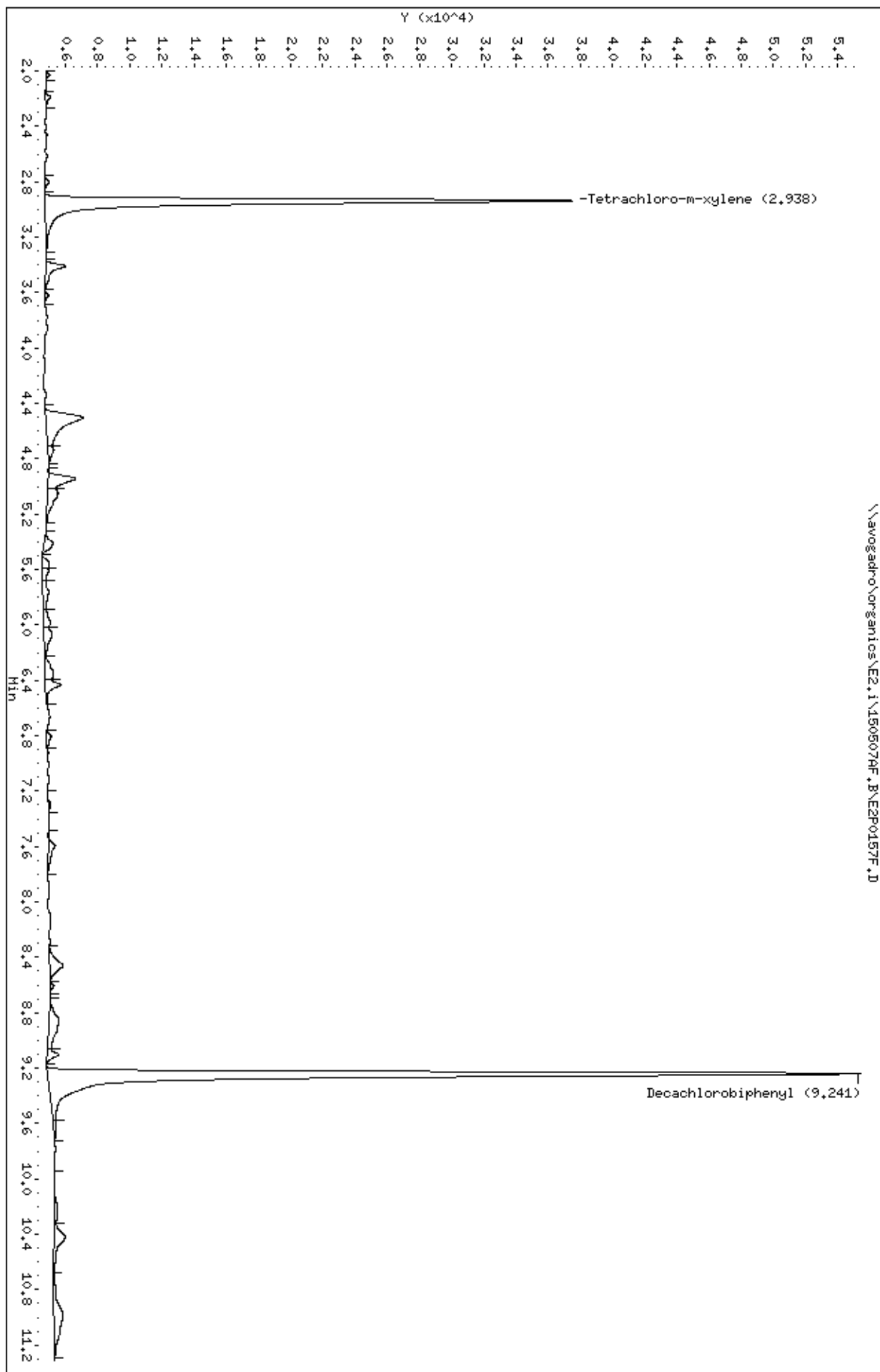
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	32803 0.04244	0.042		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.241	9.241	0.000	1519128 0.06451	0.064		

Data File: \\avogadro\organics\E2,i\150507AF.B\E2P0157F.D
Date : 07-MAY-2015 23:52
Client ID: MM-2R
Sample Info: P0667-04h,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0157R.D
 Lab Smp Id: P0667-04A Client Smp ID: MW-2R
 Inj Date : 07-MAY-2015 23:52
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-04A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 35
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

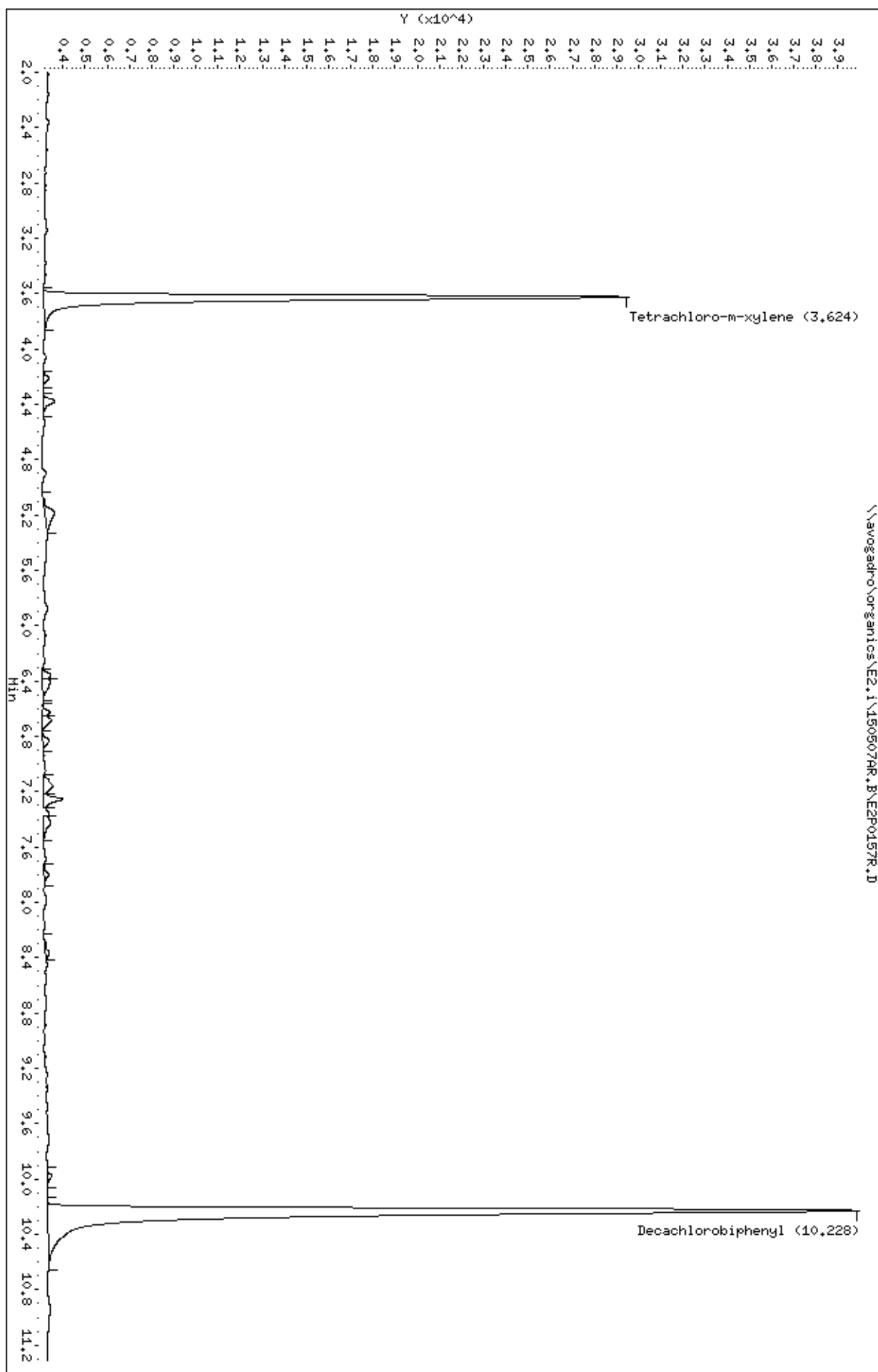
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	26476	0.04676	0.047	

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.228	10.227	0.001	36675	0.07753	0.078	

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0157R.D
Date : 07-MAY-2015 23:52
Client ID: MM-2R
Sample Info: P0667-04h,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-05A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0158F.D/E2P0158R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0158F.D
 Lab Smp Id: P0667-05A Client Smp ID: MW-3
 Inj Date : 08-MAY-2015 00:06
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-05A,, 81958, 8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.938	2.936	0.002	25983 0.03362	0.034		

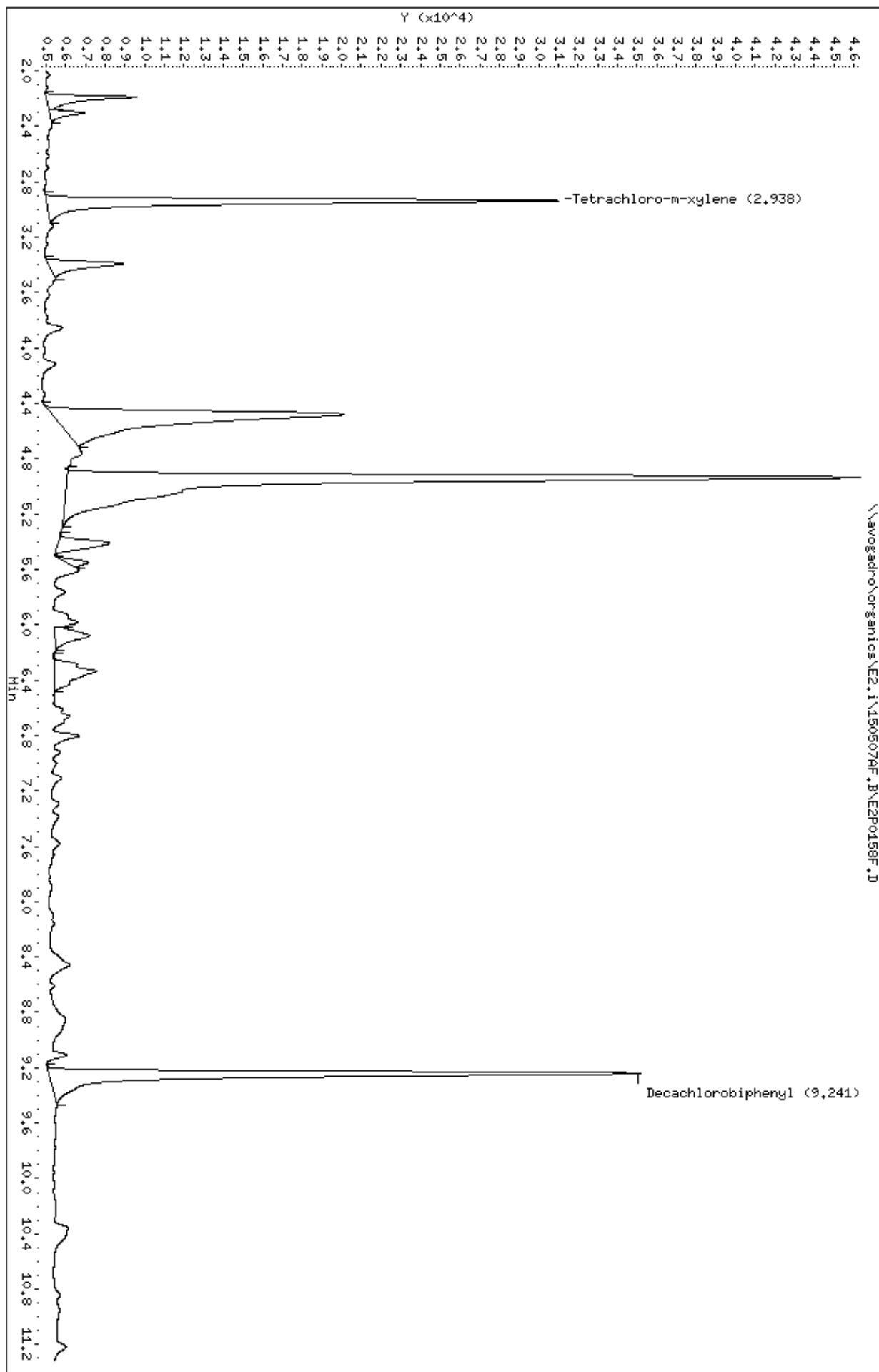
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.241	9.241	0.000	867509 0.03684	0.037	(R)	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2,i\150507HF.B\E2P0158F.D
Date : 08-MAY-2015 00:06
Client ID: MM-3
Sample Info: P0667-05H,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0158R.D
 Lab Smp Id: P0667-05A Client Smp ID: MW-3
 Inj Date : 08-MAY-2015 00:06
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-05A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	20640	0.03646	0.036	

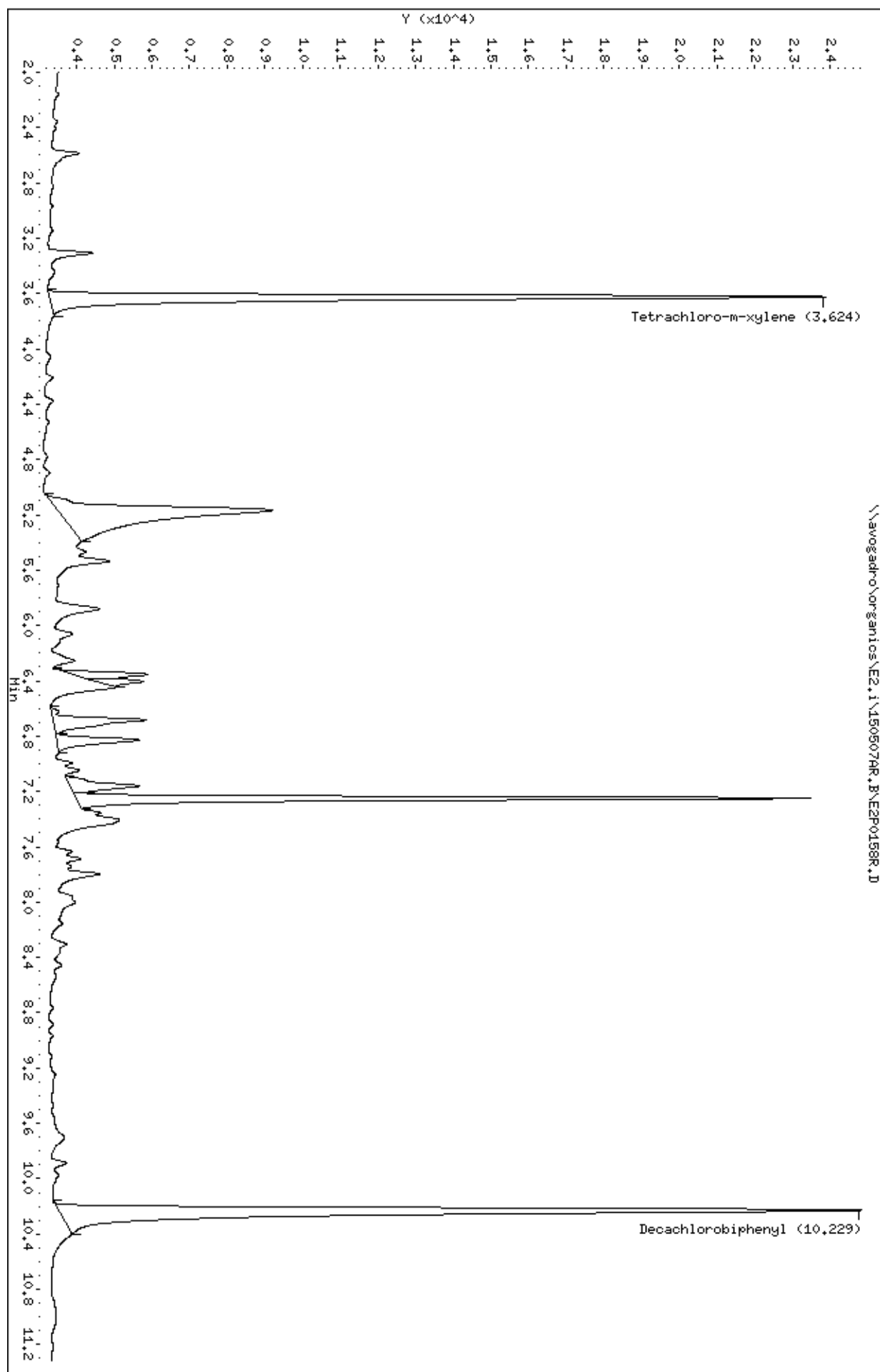
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.228	10.227	0.001	21324	0.04508	0.045	(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0158R.D
Date : 08-MAY-2015 00:06
Client ID: MM-3
Sample Info: P0667-05A,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-06A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0464F.D/E2P0464R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/13/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 100.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	5.0	U
11104-28-2	Aroclor-1221	5.0	U
11141-16-5	Aroclor-1232	5.0	U
53469-21-9	Aroclor-1242	5.0	U
12672-29-6	Aroclor-1248	120	
11097-69-1	Aroclor-1254	5.0	U
11096-82-5	Aroclor-1260	5.0	U
37324-23-5	Aroclor-1262	5.0	U
11100-14-4	Aroclor-1268	5.0	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513F.B\E2P0464F.D
 Lab Smp Id: P0667-06A Client Smp ID: MW-1
 Inj Date : 13-MAY-2015 11:37
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-06,,81958,8082A.sub,,100
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 53
 Dil Factor: 100.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

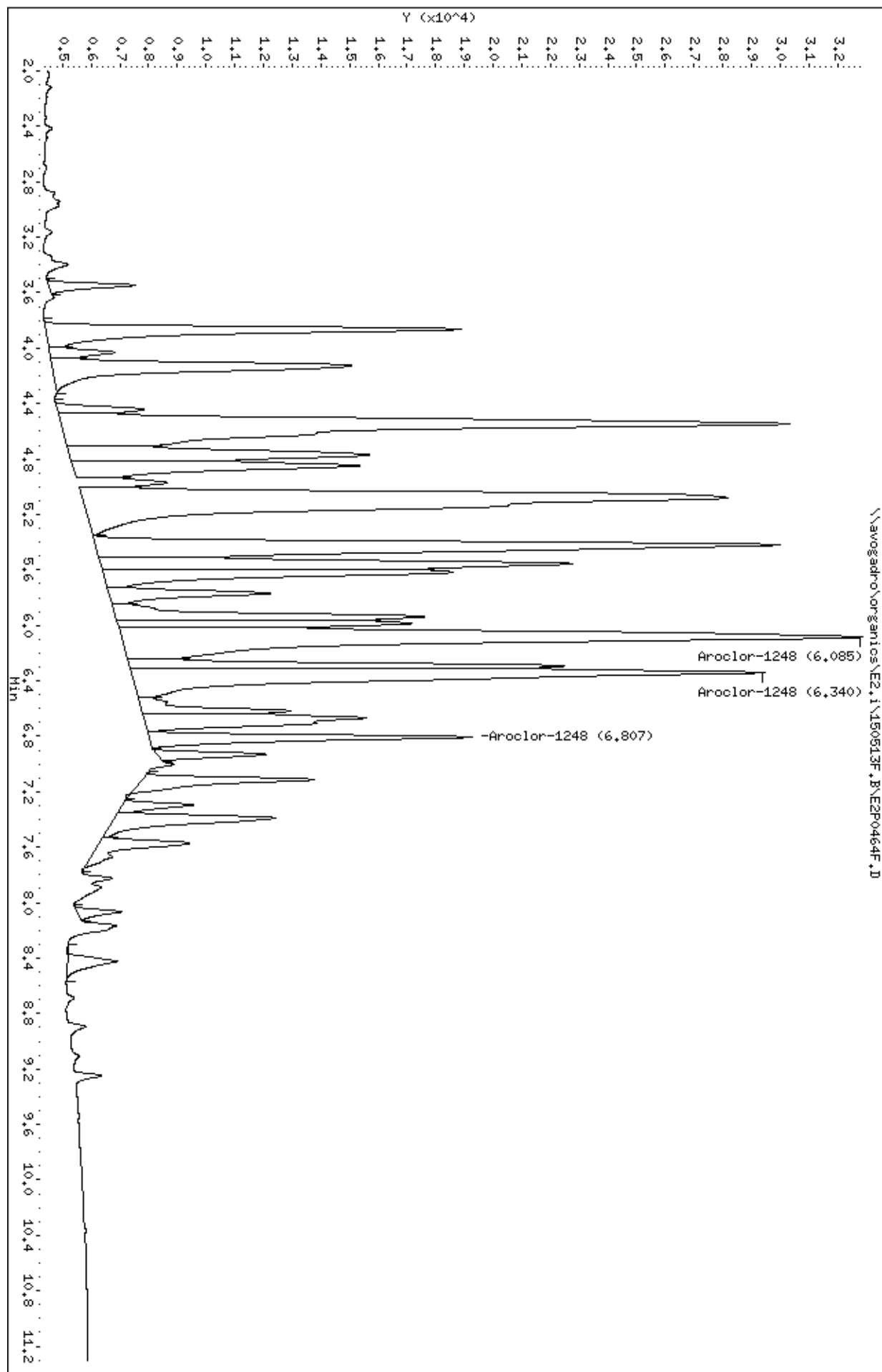
Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1248					CAS #: 12672-29-6		
6.085	6.073	0.012	25839	1.33538	130	80.00- 120.00	100.00
6.340	6.335	0.005	22067	1.28668	130	62.70- 102.70	85.40
6.806	6.803	0.003	11269	1.08977	110	29.31- 69.31	43.61
Average of Peak Concentrations =					120		

Data File: \\avogadro\organics\E2.i\150513F.B\E2P0464F.D
Date: 13-May-2015 11:37
Client ID: MW-1
Sample Info: P0667-06,,81958,8082A,sub,,100
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513R.B\E2P0464R.D
 Lab Smp Id: P0667-06A Client Smp ID: MW-1
 Inj Date : 13-MAY-2015 11:37
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-06,,81958,8082A.sub,,100
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
 Als bottle: 53
 Dil Factor: 100.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER

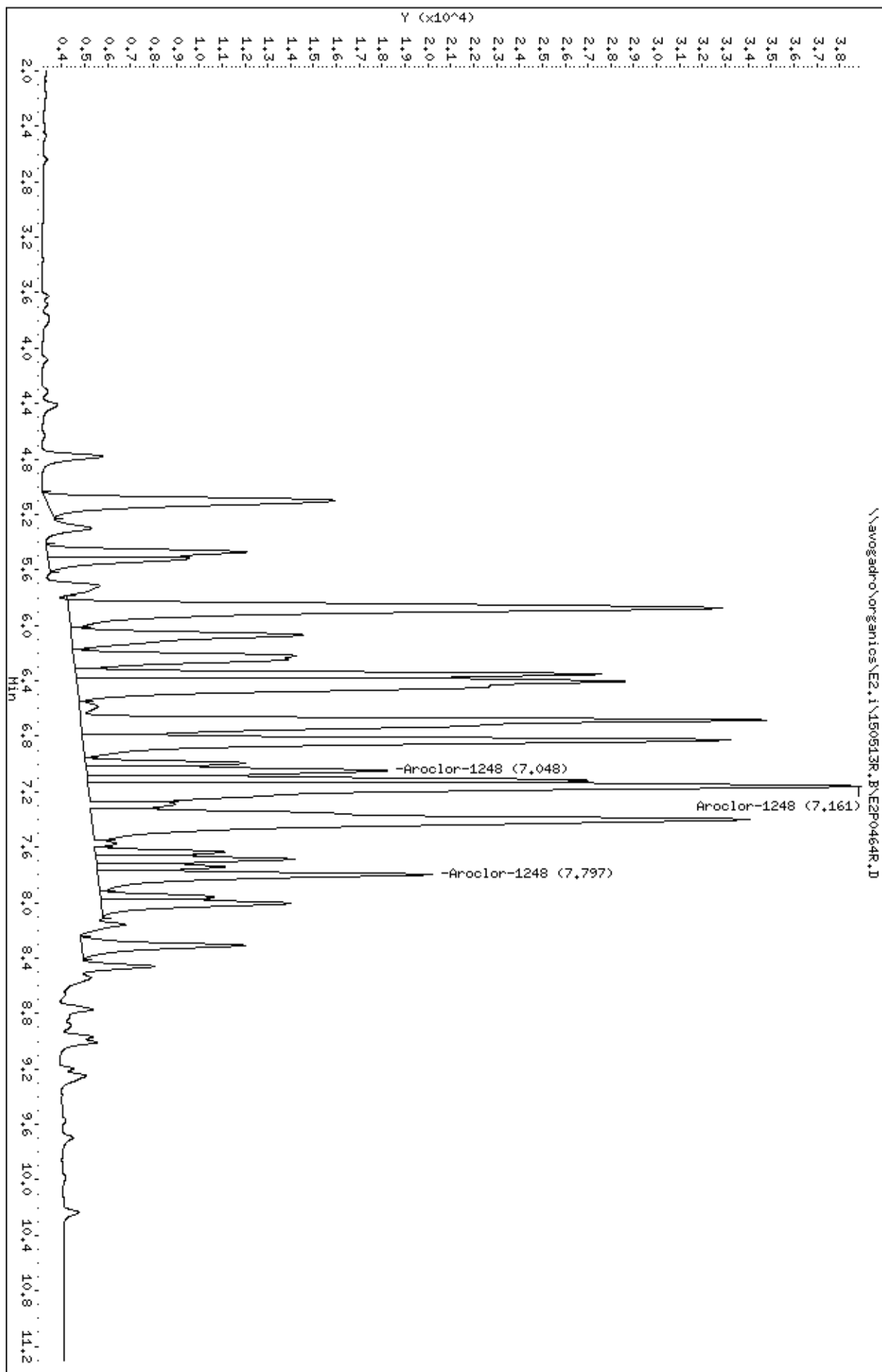
Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
5	Aroclor-1248				CAS #: 12672-29-6	
7.047	7.045	0.002	13147	1.51572	150 80.00- 120.00	100.00
7.161	7.158	0.003	33825	1.34674	130 280.12- 320.12	257.28
7.797	7.796	0.001	14617	1.15690	120 126.71- 166.71	111.18
Average of Peak Concentrations =				130		

Data File: \\avogadro\organics\E2.i\150513R.B\E2P0464R.D
Date : 13-MAY-2015 11:37
Client ID: MW-1
Sample Info: P0667-06,,81958,8082A,sub,,100
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-07A
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0160F.D/E2P0160R.D
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015
Extraction: (Type) SEPF Date Extracted: 04/29/2015
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
Acid Cleanup: (Y/N) Y _____

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0160F.D
 Lab Smp Id: P0667-07A Client Smp ID: MW-5
 Inj Date : 08-MAY-2015 00:35
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-07A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 38
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

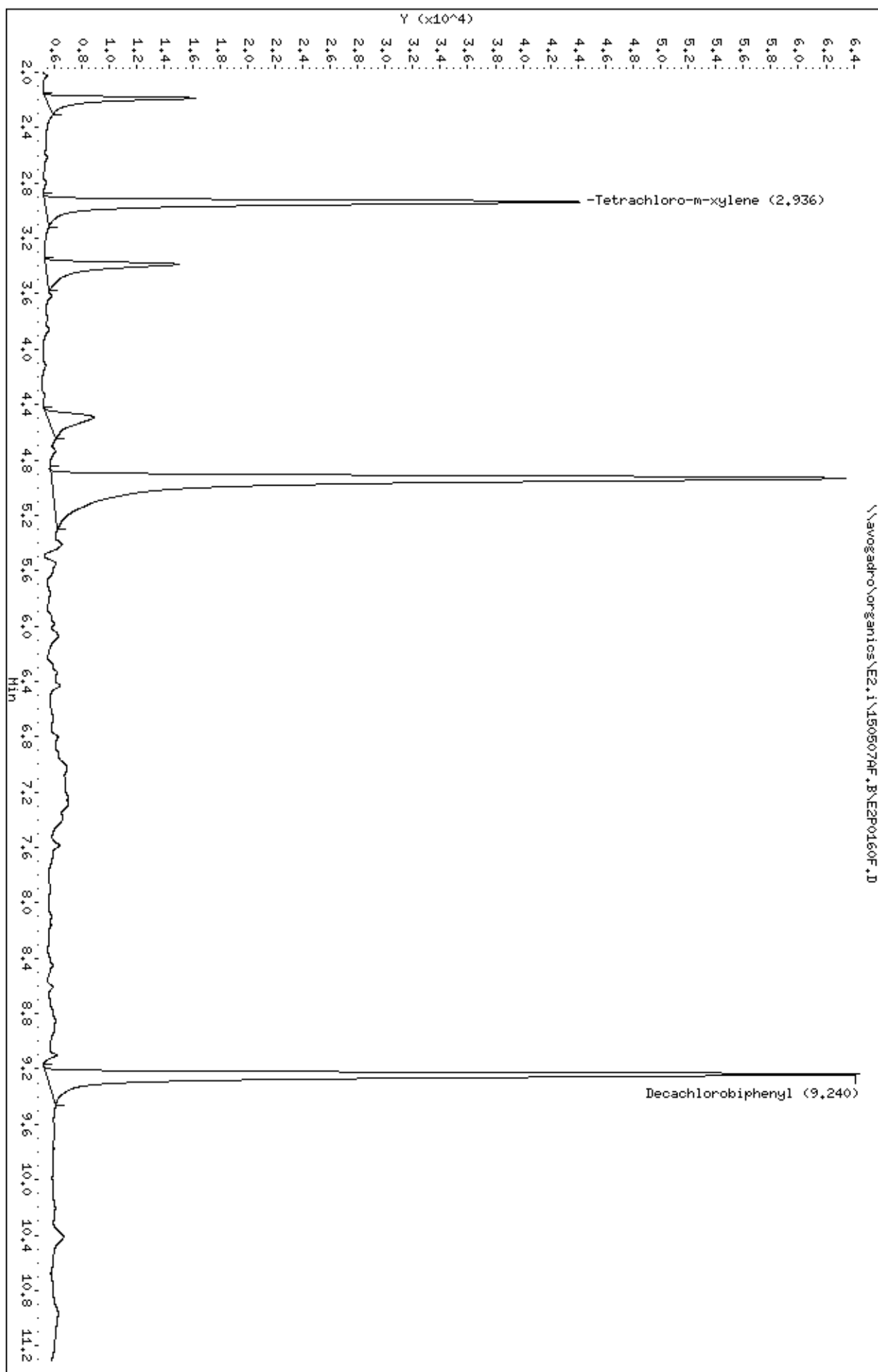
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.936	2.936	0.000	38894 0.05032	0.050		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.239	9.241	-0.002	1666415 0.07076	0.071		

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0160F.D
Date : 08-MAY-2015 00:35
Client ID: MM-5
Sample Info: P0667-07H,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0160R.D
 Lab Smp Id: P0667-07A Client Smp ID: MW-5
 Inj Date : 08-MAY-2015 00:35
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-07A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 38
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

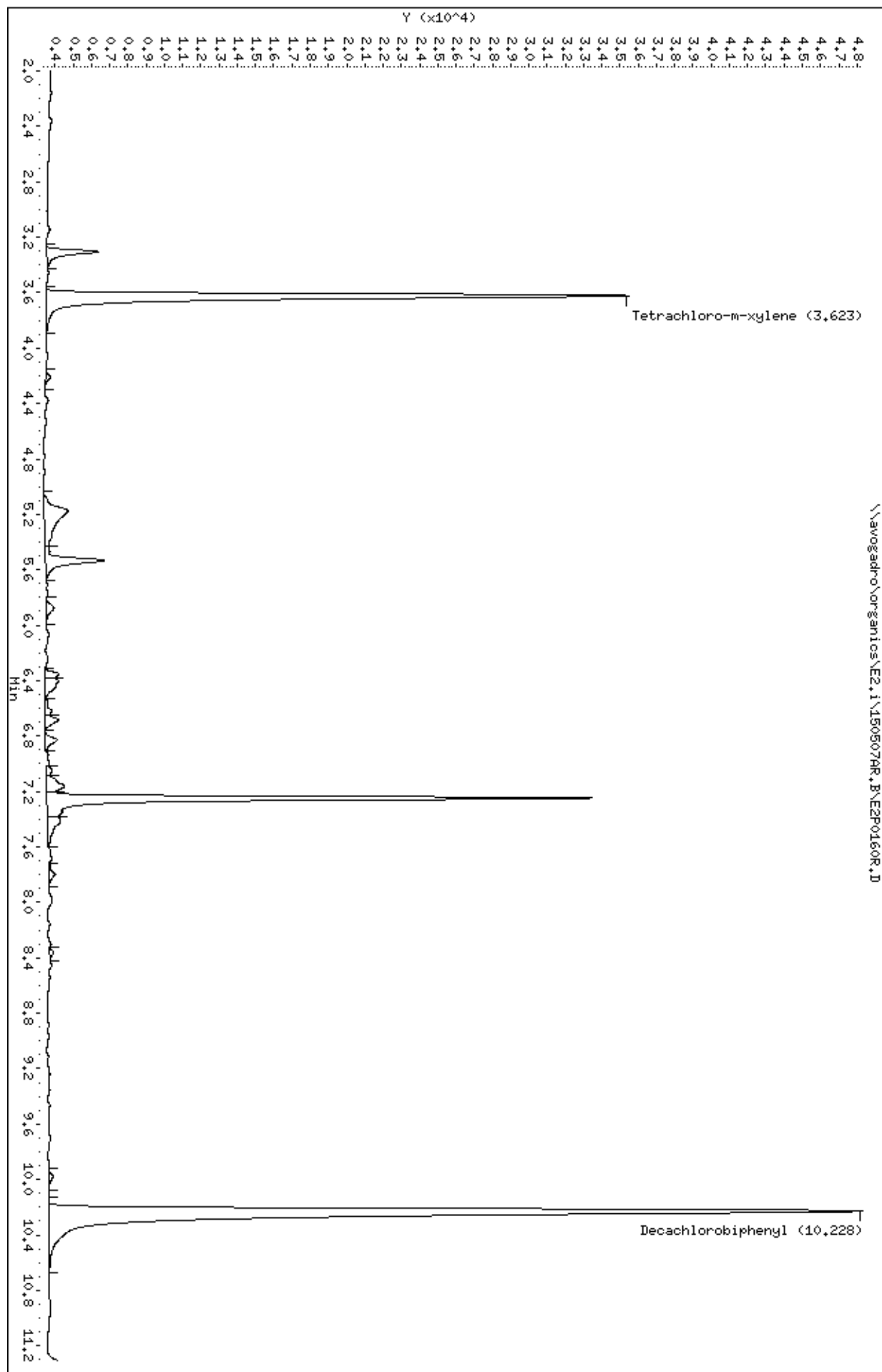
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.622	3.623	-0.001	32044 0.05660	0.056		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.227	10.227	0.000	44689 0.09447	0.094		

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0160R.D
Date : 08-MAY-2015 00:35
Client ID: MM-5
Sample Info: P0667-07A,,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-08A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0161F.D/E2P0161R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
12674-11-2	Aroclor-1016	0.050	U
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.050	U
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0161F.D
 Lab Smp Id: P0667-08A Client Smp ID: MW-7
 Inj Date : 08-MAY-2015 00:50
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-08A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 39
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

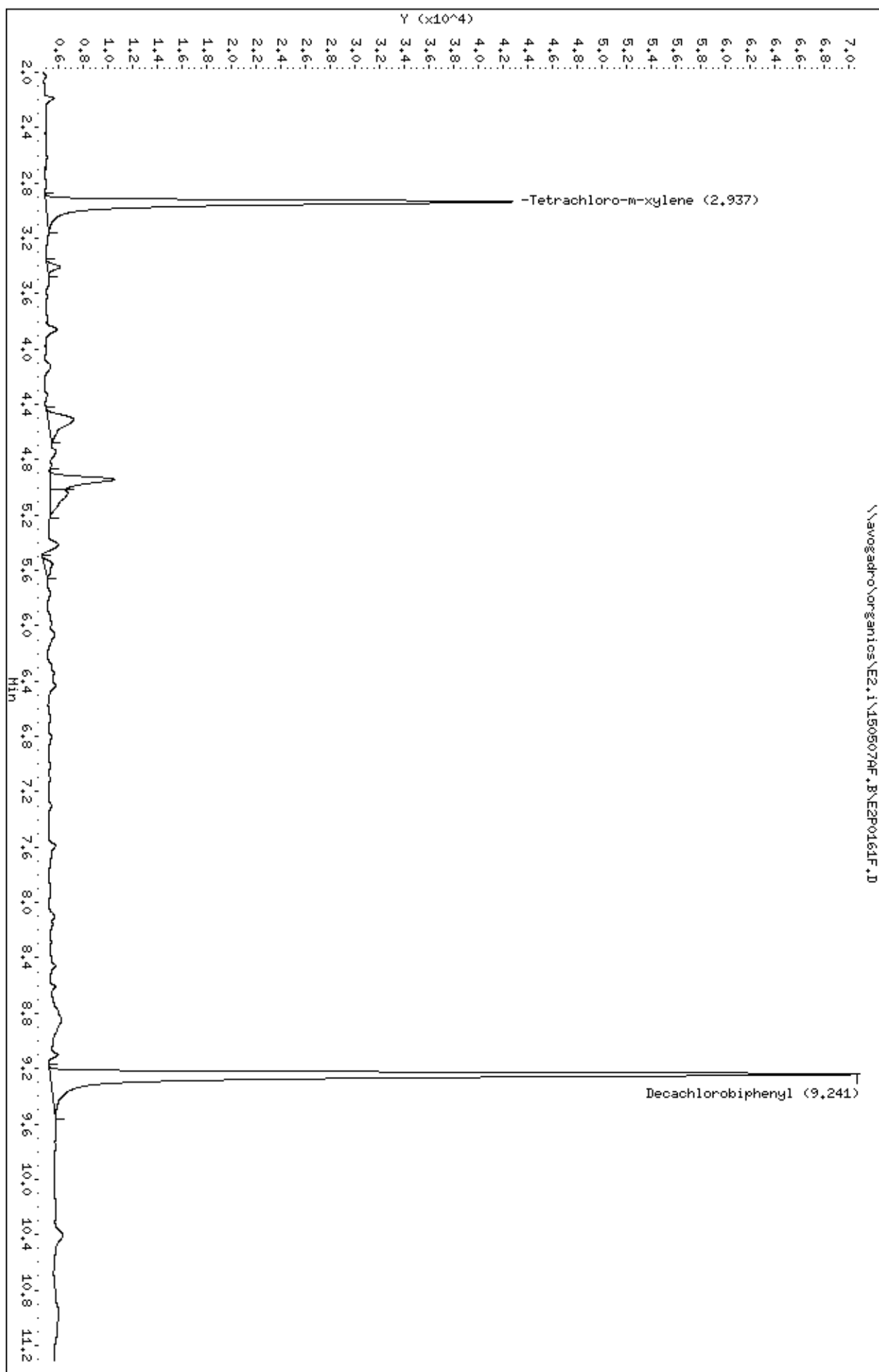
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	37827 0.04894	0.049		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.240	9.241	-0.001	1891870 0.08034	0.080		

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0161F.D
Date : 08-MAY-2015 00:50
Client ID: MW-7
Sample Info: P0667-08A,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0161R.D
 Lab Smp Id: P0667-08A Client Smp ID: MW-7
 Inj Date : 08-MAY-2015 00:50
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-08A,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 39
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

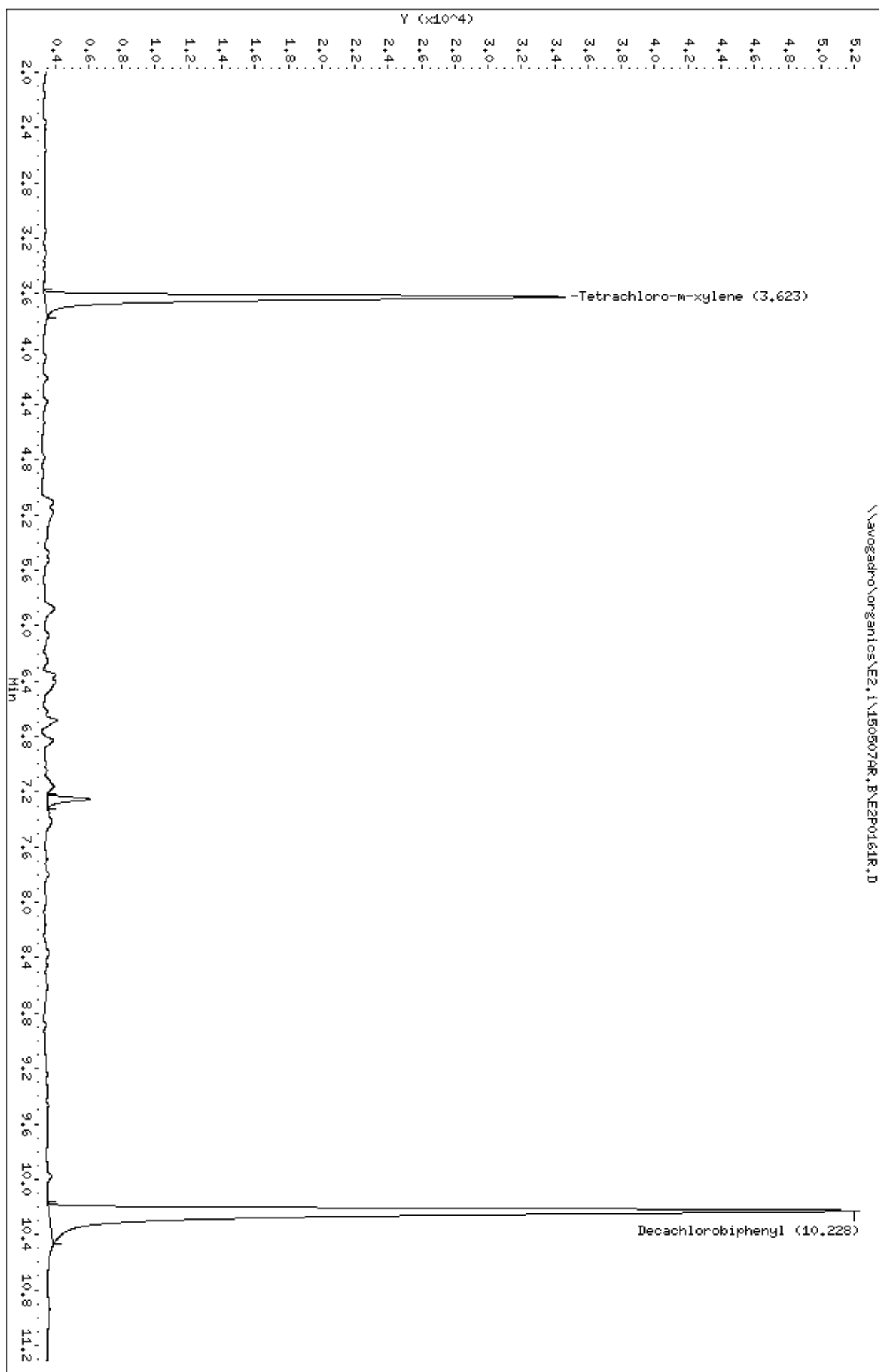
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	31277 0.05524	0.055		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.228	10.227	0.001	48697 0.10294	0.10		

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P016LR.D
Date : 08-MAY-2015 00:50
Client ID: MM-7
Sample Info: P0667-08A,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



P0667

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9

GC Column: CLPest ID: 0.53 (mm) Date(s) Analyzed (1): 05/07/2015 05/07/2015

COMPOUND	PEAK*	RT OF STANDARDS										RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	3.857	3.857	3.857	3.856	3.856	3.859				3.857	3.787	3.927
	2	4.538	4.537	4.537	4.536	4.535	4.539				4.537	4.467	4.607
	3	5.554	5.554	5.554	5.552	5.551	5.555				5.553	5.483	5.623
AR1260	1	7.299	7.296	7.294	7.292	7.290	7.302				7.295	7.225	7.365
	2	7.574	7.572	7.569	7.566	7.562	7.577				7.570	7.500	7.640
	3	8.165	8.164	8.162	8.160	8.158	8.167				8.162	8.092	8.232
AR1242	1	4.843	4.843	4.842	4.842	4.841	4.844				4.842	4.772	4.912
	2	5.557	5.557	5.557	5.556	5.555	5.558				5.556	5.486	5.626
	3	6.082	6.082	6.082	6.080	6.078	6.085				6.081	6.011	6.151
AR1248	1	6.075	6.075	6.075	6.073	6.071	6.076				6.074	6.004	6.144
	2	6.341	6.340	6.339	6.337	6.335	6.341				6.339	6.269	6.409
	3	6.809	6.808	6.807	6.805	6.803	6.810				6.807	6.737	6.877
AR1254	1	6.807	6.805	6.803	6.801	6.800	6.809				6.804	6.734	6.874
	2	6.921	6.920	6.919	6.919	6.918	6.922				6.920	6.850	6.990
	3	7.119	7.115	7.112	7.109	7.106	7.121				7.114	7.044	7.184
TCX (A)		2.937	2.937	2.937	2.937	2.936					2.937	2.887	2.987
DCB (A)		9.243	9.243	9.243	9.242	9.241					9.242	9.142	9.342

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

P0667

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9

GC Column: CLPestII ID: 0.53 (mm) Date(s) Analyzed (1): 05/07/2015 05/07/2015

COMPOUND	PEAK*	RT OF STANDARDS										RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	5.104	5.103	5.102	5.101	5.101	5.105				5.103	5.033	5.173
	2	5.876	5.875	5.874	5.873	5.872	5.878				5.875	5.805	5.945
	3	6.685	6.684	6.683	6.682	6.681	6.686				6.684	6.614	6.754
AR1260	1	7.973	7.972	7.971	7.970	7.968	7.975				7.972	7.902	8.042
	2	8.457	8.455	8.454	8.452	8.451	8.459				8.455	8.385	8.525
	3	8.965	8.964	8.962	8.961	8.959	8.968				8.963	8.893	9.033
AR1242	1	5.880	5.879	5.877	5.877	5.875	5.880				5.878	5.808	5.948
	2	6.078	6.077	6.076	6.075	6.074	6.078				6.077	6.007	6.147
	3	6.409	6.408	6.407	6.406	6.405	6.408				6.407	6.337	6.477
AR1248	1	7.052	7.051	7.049	7.047	7.044	7.053				7.049	6.979	7.119
	2	7.161	7.160	7.159	7.159	7.157	7.162				7.159	7.089	7.229
	3	7.802	7.801	7.799	7.797	7.795	7.804				7.800	7.730	7.870
AR1254	1	7.690	7.688	7.686	7.685	7.684	7.691				7.688	7.618	7.758
	2	7.974	7.972	7.970	7.970	7.969	7.975				7.972	7.902	8.042
	3	8.293	8.291	8.290	8.291	8.291	8.293				8.292	8.222	8.362
TCX (A)		3.624	3.623	3.623	3.623	3.623					3.623	3.573	3.673
DCB (A)		10.231	10.230	10.229	10.229	10.228					10.229	10.129	10.329

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

P0607

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: SDG No.: SP0667

Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9

GC Column: CLPest ID: 0.53 (mm) Date(s) Analyzed (1): 05/12/2015 05/13/2015

COMPOUND	PEAK*	RT OF STANDARDS										RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	3.860	3.860	3.859	3.859	3.857	3.861				3.859	3.789	3.929
	2	4.540	4.540	4.539	4.539	4.536	4.541				4.539	4.469	4.609
	3	5.557	5.557	5.555	5.555	5.553	5.559				5.556	5.486	5.626
AR1260	1	7.300	7.299	7.296	7.294	7.291	7.304				7.297	7.227	7.367
	2	7.575	7.573	7.569	7.567	7.564	7.578				7.571	7.501	7.641
	3	8.166	8.165	8.162	8.162	8.159	8.169				8.164	8.094	8.234
AR1242	1	4.844	4.843	4.843	4.842	4.841	4.845				4.843	4.773	4.913
	2	5.557	5.558	5.555	5.555	5.553	5.558				5.556	5.486	5.626
	3	6.084	6.084	6.082	6.081	6.078	6.087				6.083	6.013	6.153
AR1248	1	6.080	6.078	6.077	6.076	6.073	6.080				6.078	6.008	6.148
	2	6.341	6.341	6.339	6.338	6.336	6.342				6.339	6.269	6.409
	3	6.809	6.808	6.807	6.806	6.803	6.810				6.807	6.737	6.877
AR1254	1	6.809	6.807	6.805	6.802	6.801	6.810				6.806	6.736	6.876
	2	6.923	6.923	6.923	6.921	6.920	6.923				6.922	6.852	6.992
	3	7.122	7.119	7.115	7.111	7.108	7.124				7.116	7.046	7.186
TCX (A)		2.939	2.939	2.939	2.939	2.938					2.939	2.889	2.989
DCB (A)		9.246	9.245	9.243	9.244	9.243					9.244	9.144	9.344

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

P0607

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Instrument ID: E2

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9

GC Column: CLPestII ID: 0.53 (mm) Date(s) Analyzed (1): 05/12/2015 05/13/2015

COMPOUND	PEAK*	RT OF STANDARDS										RT WINDOW **	
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	RT	FROM	TO
AR1016	1	5.104	5.104	5.104	5.103	5.101	5.105				5.103	5.033	5.173
	2	5.875	5.875	5.875	5.873	5.872	5.875				5.874	5.804	5.944
	3	6.686	6.686	6.685	6.684	6.682	6.686				6.685	6.615	6.755
AR1260	1	7.975	7.974	7.972	7.971	7.970	7.976				7.973	7.903	8.043
	2	8.459	8.458	8.457	8.456	8.454	8.461				8.458	8.388	8.528
	3	8.968	8.967	8.965	8.965	8.962	8.969				8.966	8.896	9.036
AR1242	1	5.877	5.876	5.875	5.875	5.873	5.877				5.875	5.805	5.945
	2	6.078	6.077	6.076	6.076	6.073	6.079				6.076	6.006	6.146
	3	6.408	6.407	6.407	6.406	6.404	6.408				6.407	6.337	6.477
AR1248	1	7.053	7.050	7.049	7.048	7.046	7.053				7.050	6.980	7.120
	2	7.162	7.160	7.160	7.159	7.158	7.162				7.160	7.090	7.230
	3	7.802	7.801	7.799	7.798	7.797	7.803				7.800	7.730	7.870
AR1254	1	7.691	7.690	7.689	7.687	7.686	7.692				7.689	7.619	7.759
	2	8.007	8.006	8.005	8.002	8.000	8.008				8.005	7.935	8.075
	3	8.298	8.297	8.299	8.298	8.298	8.298				8.298	8.228	8.368
TCX (A)		3.624	3.624	3.625	3.624	3.623					3.624	3.574	3.674
DCB (A)		10.233	10.232	10.230	10.231	10.229					10.231	10.131	10.331

* At least three peaks for each column are required for identification of Aroclors.

**Retention Time windows are ± 0.07 minutes for each Aroclor peak; 0.05 minutes for tetrachloro-m-xylene; ± 0.10 minutes for decachlorobiphenyl.

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

P0667

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: SDG No.: SP0667
Instrument ID: E2 Date(s) Analyzed: 05/07/2015 05/07/2015

GC Column: CLPPest ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9 16.0

COMPOUND	PEAK ¹	CALIBRATION FACTORS (CFs)									% RSD
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	
AR1016	1	27530	25815	24513	22023	20146	29320				13.7
	2	22200	22920	23420	23080	22826	22600				1.8
	3	9800	10140	10425	9959	9651	8540				6.7
AR1260	1	47470	46215	46190	42761	40154	50640				8.1
	2	38560	38285	39133	36944	35383	40680				4.8
	3	57110	56505	58085	54339	51653	59780				5.1
AR1242	1	7750	7600	7923	7983	8110	7500				3.0
	2	6940	7045	7458	7561	7814	7140				4.6
	3	8060	8070	9100	9678	10365	7600				12.3
AR1248	1	14730	15810	17560	17334	17872	14200				9.6
	2	15510	15925	17178	16409	16426	15360				4.2
	3	9780	9960	11673	11218	11451	9480				9.0
AR1254	1	31390	34215	33740	33408	32096	32560				3.3
	2	12740	14355	13600	12770	11768	13840				7.1
	3	14260	17290	17335	17666	17767	14860				9.4
DCB (A)	l	26613100	24778750	24542300	21693088	20120481					11.1
TCX (A)	e	817000	795900	806450	743375	702050					6.3

At least three peaks for each column are required for identification of Aroclors.

P0609

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Instrument ID: E2 Date(s) Analyzed: 05/07/2015 05/07/2015

GC Column: CLPestII ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9 16.0

COMPOUND	PEAK ¹	CALIBRATION FACTORS (CFs)										% RSD
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9		
AR1016	1	19770	19155	18470	16730	15468	21300				11.4	
	2	18560	19075	19865	19961	20116	18100				4.3	
	3	13810	13935	14318	13643	13275	13640				2.5	
AR1260	1	31660	31270	31598	29353	27803	33480				6.5	
	2	29120	29290	30780	29301	28563	30200				2.7	
	3	38230	38495	40815	38489	37364	40080				3.3	
AR1242	1	13490	13825	14680	15245	15461	13040				6.9	
	2	8030	8285	8635	8863	8870	7880				5.1	
	3	9700	9705	9765	9701	9418	9740				1.3	
AR1248	1	5000	5320	5650	6316	6676	4880				12.8	
	2	17400	17530	17830	18160	18279	17580				2.0	
	3	8290	8415	8660	9398	9656	8180				7.0	
AR1254	1	15480	16660	16668	16703	16549	14020				6.8	
	2	18870	19635	19040	18278	17560	18560				3.8	
	3	14590	15975	15915	15868	15820	14500				4.5	
DCB (A)	l	524300	495500	494925	437538	413031					9.7	
TCX (A)	e	535400	549600	594600	578050	573150					4.2	

At least three peaks for each column are required for identification of Aroclors.

P0667

Contract:

Lab Name: SPECTRUM ANALYTICAL, INC.

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: SDG No.: SP0667
Instrument ID: E2 Date(s) Analyzed: 05/12/2015 05/13/2015

GC Column: CLPest ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9 16.0

COMPOUND	PEAK ¹	CALIBRATION FACTORS (CFs)									% RSD
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	
AR1016	1	26230	25060	23845	21153	19309	28600				14.1
	2	25530	25750	26688	25651	25344	23740				3.8
	3	8450	9715	10300	9708	9404	8640				7.5
AR1260	1	49730	47745	47953	43251	40813	52780				9.2
	2	41340	40375	41633	38530	36734	43300				5.8
	3	62040	60950	62698	57456	54278	64720				6.3
AR1242	1	8330	8380	8560	8411	8466	8260				1.2
	2	7120	7710	7830	7655	7836	7020				4.8
	3	10500	11250	11865	11974	12498	10060				8.2
AR1248	1	18340	18495	20753	20643	20648	17220				7.9
	2	16540	16875	18370	17999	17398	15720				5.7
	3	8680	10445	11860	11821	11518	7720				17.0
AR1254	1	34120	34425	34685	34518	33158	31800				3.3
	2	13390	12840	12785	12013	11138	10280				9.7
	3	19300	19740	20788	21219	21274	15060				12.0
DCB (A)	l	27451800	25443850	24731900	21293013	19274513					14.0
TCX (A)	e	764600	761000	778750	713900	679438					5.6

At least three peaks for each column are required for identification of Aroclors.

P0667

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: SDG No.: SP0667
Instrument ID: E2 Date(s) Analyzed: 05/12/2015 05/13/2015

GC Column: CLPestII ID: 0.53 (mm)

Level (x CS1): CS1 1.0 CS2 2.0 CS3 4.0 CS4 8.0 CS5 16.0 CS6 0.5 CS7 CS8 CS9 16.0

COMPOUND	PEAK ¹	CALIBRATION FACTORS (CFs)									% RSD
		CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	
AR1016	1	22320	21225	20900	18844	17258	24200				11.9
	2	25800	26745	28575	28780	28683	25420				5.6
	3	16740	16785	17643	16818	16243	16940				2.7
AR1260	1	39080	38185	38373	34933	32631	41000				8.1
	2	44470	45100	47503	44793	42891	45180				3.3
	3	62120	63290	66208	61625	58866	62780				3.8
AR1242	1	20760	21865	23518	23693	23706	19820				7.5
	2	12070	12550	13075	12903	12583	10680				7.1
	3	12730	12715	12815	12170	11488	12240				4.1
AR1248	1	8030	8320	8905	9556	10211	7020				13.1
	2	25000	24835	25393	25686	25784	24000				2.6
	3	12480	12515	12868	13428	13578	10940				7.5
AR1254	1	20570	22625	23005	23411	23168	21480				5.0
	2	24050	26335	26960	27856	27968	25160				5.9
	3	19470	21695	22130	22976	23314	20040				7.2
DCB (A)	l	717200	683250	680875	592675	545706					11.1
TCX (A)	e	570600	591800	645050	624675	619150					4.8

At least three peaks for each column are required for identification of Aroclors.

6Q - FORM VI ARO-3
AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 Instrument ID: E2 Date(s) Analyzed: 05/07/2015 05/07/2015
 GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK ¹	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	0.4	1	2.39	2.32	2.46	7615
		2	3.16	3.09	3.23	6653
		3	3.39	3.32	3.46	15100
		4				
		5				
Aroclor-1232	0.4	1	3.16	3.09	3.23	4643
		2	3.86	3.79	3.93	11268
		3	4.14	4.07	4.21	5710
		4				
		5				
Aroclor-1262	0.4	1	8.45	8.38	8.52	53745
		2	8.68	8.61	8.75	16045
		3	8.89	8.82	8.96	28888
		4				
		5				
Aroclor-1268	0.4	1	8.67	8.60	8.74	35270
		2	8.89	8.82	8.96	32200
		3	9.10	9.03	9.17	226630
		4				
		5				

¹ At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI ARO-3
 AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 Instrument ID: E2 Date(s) Analyzed: 05/07/2015 05/07/2015
 GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK ¹	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	0.4	1	3.01	2.94	3.08	5730
		2	4.08	4.01	4.15	4373
		3	4.41	4.34	4.48	9683
		4				
		5				
Aroclor-1232	0.4	1	4.31	4.24	4.38	2443
		2	5.11	5.04	5.18	7715
		3	5.53	5.46	5.60	3688
		4				
		5				
Aroclor-1262	0.4	1	8.96	8.89	9.03	45740
		2	9.24	9.17	9.31	38500
		3	9.69	9.62	9.76	16468
		4				
		5				
Aroclor-1268	0.4	1	9.24	9.17	9.31	73188
		2	9.46	9.39	9.53	68238
		3	9.97	9.90	10.04	130703
		4				
		5				

¹ At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI ARO-3
AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 Instrument ID: E2 Date(s) Analyzed: 05/12/2015 05/12/2015
 GC Column: CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK ¹	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	0.4	1	2.39	2.32	2.46	7520
		2	3.16	3.09	3.23	7300
		3	3.39	3.32	3.46	16463
		4				
		5				
Aroclor-1232	0.4	1	3.16	3.09	3.23	5125
		2	3.86	3.79	3.93	10993
		3	4.14	4.07	4.21	6078
		4				
		5				
Aroclor-1262	0.4	1	8.45	8.38	8.52	53188
		2	8.69	8.62	8.76	16048
		3	8.89	8.82	8.96	32015
		4				
		5				
Aroclor-1268	0.4	1	8.67	8.60	8.74	34090
		2	8.89	8.82	8.96	35705
		3	9.10	9.03	9.17	239055
		4				
		5				

¹ At least three peaks for each column are required for identification of multicomponent analytes.

6Q - FORM VI ARO-3
AROCLOR INITIAL CALIBRATION (SINGLE POINT)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 Instrument ID: E2 Date(s) Analyzed: 05/12/2015 05/12/2015
 GC Column: CLPPestII ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK ¹	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	0.4	1	3.00	2.93	3.07	6823
		2	4.08	4.01	4.15	5818
		3	4.41	4.34	4.48	13098
		4				
		5				
Aroclor-1232	0.4	1	4.31	4.24	4.38	3270
		2	5.11	5.04	5.18	9348
		3	5.53	5.46	5.60	4515
		4				
		5				
Aroclor-1262	0.4	1	8.97	8.90	9.04	75793
		2	9.24	9.17	9.31	57433
		3	9.69	9.62	9.76	28490
		4				
		5				
Aroclor-1268	0.4	1	9.24	9.17	9.31	100380
		2	9.47	9.40	9.54	81900
		3	9.98	9.91	10.05	208345
		4				
		5				

¹ At least three peaks for each column are required for identification of multicomponent analytes.

7N - FORM VII ARO
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: P0667	Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPest ID: 0.53 (mm)	Calibration Date(s): 05/07/2015 05/07/2015
EPA Sample No. (AR####3##): AR16603CA	Date Analyzed: 05/07/2015
Lab Sample ID: AR16603CA	Time Analyzed: 21:27
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): AR12483CA	Date Analyzed: 05/07/2015
Lab Sample ID: AR12483CA	Time Analyzed: 22:11
EPA Sample No. (AR####3##): AR12543CA	Date Analyzed: 05/07/2015
Lab Sample ID: AR12543CA	Time Analyzed: 21:42

AROCLOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	3.858	3.787	3.927	24891.04167	24250	-2.6
	2	4.538	4.467	4.607	22840.9375	22950	0.5
	3	5.554	5.483	5.623	9752.395833	10297.5	5.6
AR1260	1	7.295	7.225	7.365	45571.77083	45897.5	0.7
	2	7.569	7.500	7.640	38163.95833	38972.5	2.1
	3	8.162	8.092	8.232	56245.20833	57842.5	2.8
TCX		2.937	2.887	2.987	772955	797050	3.1
DCB		9.243	9.142	9.342	23549543.75	24542725	4.2
AR1248	1	6.074	6.004	6.144	16250.9375	18175	11.8
	2	6.339	6.269	6.409	16134.58333	17552.5	8.8
	3	6.807	6.737	6.877	10593.54167	12057.5	13.8
TCX		2.939	2.887	2.987	772955	786850	1.8
DCB		9.245	9.142	9.342	23549543.75	24222150	2.9
AR1254	1	6.804	6.734	6.874	32901.35417	33442.5	1.6
	2	6.921	6.850	6.990	13178.85417	13475	2.2
	3	7.114	7.044	7.184	16529.6875	17445	5.5
TCX		2.938	2.887	2.987	772955	779750	0.9
DCB		9.243	9.142	9.342	23549543.75	23802350	1.1

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

7N - FORM VII ARO
AROCOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: P0667	Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPestII ID: 0.53 (mm)	Calibration Date(s): 05/07/2015 05/07/2015
EPA Sample No. (AR####3##): AR16603CA	Date Analyzed: 05/07/2015
Lab Sample ID: AR16603CA	Time Analyzed: 21:27
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): AR12483CA	Date Analyzed: 05/07/2015
Lab Sample ID: AR12483CA	Time Analyzed: 22:11
EPA Sample No. (AR####3##): AR12543CA	Date Analyzed: 05/07/2015
Lab Sample ID: AR12543CA	Time Analyzed: 21:42

AROCOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	5.103	5.033	5.173	18482.1875	18235	-1.3
	2	5.875	5.805	5.945	19279.58333	19622.5	1.8
	3	6.684	6.614	6.754	13770	14142.5	2.7
AR1260	1	7.971	7.902	8.042	30860.41667	31502.5	2.1
	2	8.454	8.385	8.525	29542.39583	30840	4.4
	3	8.962	8.893	9.033	38912.1875	40772.5	4.8
TCX		3.623	3.573	3.673	566160	588850	4.0
DCB		10.230	10.129	10.329	473058.75	493925	4.4
AR1248	1	7.049	6.979	7.119	5640.3125	6105	8.2
	2	7.159	7.089	7.229	17796.45833	18550	4.2
	3	7.799	7.730	7.870	8766.458333	9617.5	9.7
TCX		3.624	3.573	3.673	566160	589850	4.2
DCB		10.231	10.129	10.329	473058.75	495350	4.7
AR1254	1	7.687	7.618	7.758	16013.125	17197.5	7.4
	2	7.972	7.902	8.042	18657.08333	19482.5	4.4
	3	8.291	8.222	8.362	15444.58333	16487.5	6.8
TCX		3.624	3.573	3.673	566160	584450	3.2
DCB		10.230	10.129	10.329	473058.75	489725	3.5

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>P0667</u>	Mod. Ref No.: _____ SDG No.: <u>SP0667</u>
GC Column: <u>CLPPest</u> ID: <u>0.53</u> (mm)	Calibration Date(s): <u>05/07/2015</u> <u>05/07/2015</u>
EPA Sample No. (AR####3##): <u>AR16603CB</u>	Date Analyzed: <u>05/08/2015</u>
Lab Sample ID: <u>AR16603CB</u>	Time Analyzed: <u>4:13</u>
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): <u>AR12483CB</u>	Date Analyzed: <u>05/08/2015</u>
Lab Sample ID: <u>AR12483CB</u>	Time Analyzed: <u>4:56</u>
EPA Sample No. (AR####3##): <u>AR12543CB</u>	Date Analyzed: <u>05/08/2015</u>
Lab Sample ID: <u>AR12543CB</u>	Time Analyzed: <u>4:27</u>

AROCLOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	3.857	3.787	3.927	24891.04167	24445	-1.8
	2	4.536	4.467	4.607	22840.9375	25272.5	10.6
	3	5.553	5.483	5.623	9752.395833	10512.5	7.8
AR1260	1	7.294	7.225	7.365	45571.77083	48162.5	5.7
	2	7.567	7.500	7.640	38163.95833	41515	8.8
	3	8.161	8.092	8.232	56245.20833	61727.5	9.7
TCX		2.937	2.887	2.987	772955	799100	3.4
DCB		9.242	9.142	9.342	23549543.75	24695725	4.9
AR1248	1	6.073	6.004	6.144	16250.9375	18457.5	13.6
	2	6.336	6.269	6.409	16134.58333	16562.5	2.7
	3	6.804	6.737	6.877	10593.54167	10082.5	-4.8
TCX		2.937	2.887	2.987	772955	788450	2.0
DCB		9.242	9.142	9.342	23549543.75	23961450	1.7
AR1254	1	6.803	6.734	6.874	32901.35417	35460	7.8
	2	6.920	6.850	6.990	13178.85417	13565	2.9
	3	7.113	7.044	7.184	16529.6875	19675	19.0
TCX		2.938	2.887	2.987	772955	784950	1.6
DCB		9.243	9.142	9.342	23549543.75	24177775	2.7

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

7N - FORM VII ARO
AROCOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: P0667	Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPestII ID: 0.53 (mm)	Calibration Date(s): 05/07/2015 05/07/2015
EPA Sample No. (AR####3##): AR16603CB	Date Analyzed: 05/08/2015
Lab Sample ID: AR16603CB	Time Analyzed: 4:13
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): AR12483CB	Date Analyzed: 05/08/2015
Lab Sample ID: AR12483CB	Time Analyzed: 4:56
EPA Sample No. (AR####3##): AR12543CB	Date Analyzed: 05/08/2015
Lab Sample ID: AR12543CB	Time Analyzed: 4:27

AROCOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	5.102	5.033	5.173	18482.1875	19010	2.9
	2	5.874	5.805	5.945	19279.58333	21022.5	9.0
	3	6.684	6.614	6.754	13770	14960	8.6
AR1260	1	7.971	7.902	8.042	30860.41667	33267.5	7.8
	2	8.454	8.385	8.525	29542.39583	33270	12.6
	3	8.962	8.893	9.033	38912.1875	41780	7.4
TCX		3.624	3.573	3.673	566160	614450	8.5
DCB		10.230	10.129	10.329	473058.75	576475	21.9
AR1248	1	7.047	6.979	7.119	5640.3125	6237.5	10.6
	2	7.158	7.089	7.229	17796.45833	20277.5	13.9
	3	7.797	7.730	7.870	8766.458333	9592.5	9.4
TCX		3.624	3.573	3.673	566160	618300	9.2
DCB		10.229	10.129	10.329	473058.75	575125	21.6
AR1254	1	7.687	7.618	7.758	16013.125	18465	15.3
	2	7.971	7.902	8.042	18657.08333	20095	7.7
	3	8.292	8.222	8.362	15444.58333	17230	11.6
TCX		3.623	3.573	3.673	566160	614300	8.5
DCB		10.230	10.129	10.329	473058.75	568300	20.1

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

7N - FORM VII ARO
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>P0667</u>	Mod. Ref No.: _____ SDG No.: <u>SP0667</u>
GC Column: <u>CLPPest</u> ID: <u>0.53</u> (mm)	Calibration Date(s): <u>05/12/2015</u> <u>05/13/2015</u>
EPA Sample No. (AR####3##): <u>AR16603ED</u>	Date Analyzed: <u>05/13/2015</u>
Lab Sample ID: <u>AR16603ED</u>	Time Analyzed: <u>11:06</u>
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): <u>AR12483ED</u>	Date Analyzed: <u>05/13/2015</u>
Lab Sample ID: <u>AR12483ED</u>	Time Analyzed: <u>11:20</u>
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____

AROCLOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	3.860	3.789	3.929	24032.70833	23947.5	-0.4
	2	4.539	4.469	4.609	25450.52083	28017.5	10.1
	3	5.555	5.486	5.626	9369.479167	9122.5	-2.6
AR1260	1	7.293	7.227	7.367	47045.3125	50007.5	6.3
	2	7.566	7.501	7.641	40318.54167	43367.5	7.6
	3	8.160	8.094	8.234	60356.875	64697.5	7.2
TCX		2.940	2.889	2.989	739537.5	777500	5.1
DCB		9.243	9.144	9.344	23639015	21952650	-7.1
AR1248	1	6.076	6.008	6.148	19349.58333	22125	14.3
	2	6.338	6.269	6.409	17150.3125	18182.5	6.0
	3	6.804	6.737	6.877	10340.72917	10955	5.9
TCX		2.940	2.889	2.989	739537.5	767550	3.8
DCB		9.244	9.144	9.344	23639015	21690150	-8.2

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

7N - FORM VII ARO
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: P0667	Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPestII ID: 0.53 (mm)	Calibration Date(s): 05/12/2015 05/13/2015
EPA Sample No. (AR####3##): AR16603ED	Date Analyzed: 05/13/2015
Lab Sample ID: AR16603ED	Time Analyzed: 11:06
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): AR12483ED	Date Analyzed: 05/13/2015
Lab Sample ID: AR12483ED	Time Analyzed: 11:20
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____

AROCLOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	5.105	5.033	5.173	20791.14583	20152.5	-3.1
	2	5.875	5.804	5.944	27333.85417	30000	9.8
	3	6.686	6.615	6.755	16861.35417	17387.5	3.1
AR1260	1	7.973	7.903	8.043	37366.77083	37815	1.2
	2	8.456	8.388	8.528	44989.27083	46910	4.3
	3	8.965	8.896	9.036	62481.35417	56985	-8.8
TCX		3.625	3.574	3.674	610255	632950	3.7
DCB		10.232	10.131	10.331	643941.25	637475	-1.0
AR1248	1	7.050	6.980	7.120	8673.75	8822.5	1.7
	2	7.162	7.090	7.230	25116.25	25962.5	3.4
	3	7.799	7.730	7.870	12634.58333	12692.5	0.5
TCX		3.627	3.574	3.674	610255	633100	3.7
DCB		10.231	10.131	10.331	643941.25	635475	-1.3

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

7N - FORM VII ARO
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: P0667	Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPest ID: 0.53 (mm)	Calibration Date(s): 05/12/2015 05/13/2015
EPA Sample No. (AR####3##): AR16603EE	Date Analyzed: 05/13/2015
Lab Sample ID: AR16603EE	Time Analyzed: 12:06
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): AR12483EE	Date Analyzed: 05/13/2015
Lab Sample ID: AR12483EE	Time Analyzed: 12:21
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____

AROCLOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	3.860	3.789	3.929	24032.70833	23882.5	-0.6
	2	4.540	4.469	4.609	25450.52083	28152.5	10.6
	3	5.555	5.486	5.626	9369.479167	9182.5	-2.0
AR1260	1	7.293	7.227	7.367	47045.3125	50667.5	7.7
	2	7.565	7.501	7.641	40318.54167	43960	9.0
	3	8.160	8.094	8.234	60356.875	66275	9.8
TCX		2.940	2.889	2.989	739537.5	777800	5.2
DCB		9.243	9.144	9.344	23639015	21872175	-7.5
AR1248	1	6.079	6.008	6.148	19349.58333	21630	11.8
	2	6.340	6.269	6.409	17150.3125	17887.5	4.3
	3	6.806	6.737	6.877	10340.72917	10665	3.1
TCX		2.941	2.889	2.989	739537.5	760850	2.9
DCB		9.245	9.144	9.344	23639015	21620425	-8.5

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

7N - FORM VII ARO
 AROCLOR CALIBRATION VERIFICATION SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: P0667	Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPestII ID: 0.53 (mm)	Calibration Date(s): 05/12/2015 05/13/2015
EPA Sample No. (AR####3##): AR16603EE	Date Analyzed: 05/13/2015
Lab Sample ID: AR16603EE	Time Analyzed: 12:06
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____
EPA Sample No. (AR####3##): AR12483EE	Date Analyzed: 05/13/2015
Lab Sample ID: AR12483EE	Time Analyzed: 12:21
EPA Sample No. (AR####3##): _____	Date Analyzed: _____
Lab Sample ID: _____	Time Analyzed: _____

AROCLOR COMPOUND	PEAK	RETENTION	RT WINDOW		CF	CF	%D
		RT	FROM	TO			
AR1016	1	5.106	5.033	5.173	20791.14583	20205	-2.8
	2	5.876	5.804	5.944	27333.85417	30185	10.4
	3	6.686	6.615	6.755	16861.35417	17495	3.8
AR1260	1	7.973	7.903	8.043	37366.77083	38545	3.2
	2	8.456	8.388	8.528	44989.27083	48792.5	8.5
	3	8.965	8.896	9.036	62481.35417	66065	5.7
TCX		3.627	3.574	3.674	610255	636400	4.3
DCB		10.231	10.131	10.331	643941.25	650975	1.1
AR1248	1	7.051	6.980	7.120	8673.75	8542.5	-1.5
	2	7.162	7.090	7.230	25116.25	25637.5	2.1
	3	7.800	7.730	7.870	12634.58333	12532.5	-0.8
TCX		3.626	3.574	3.674	610255	630600	3.3
DCB		10.232	10.131	10.331	643941.25	645650	0.3

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

8H - FORM VIII ARO
AROCOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 05/07/2015 05/07/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>2.937</u>			DCB: <u>9.242</u>			
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT
01	AR12213C2	E2P0118F.D	5/7/2015	14:28	2.938	9.244
02	AR12323C2	E2P0119F.D	5/7/2015	14:43	2.939	9.245
03	AR12421C2	E2P0120F.D	5/7/2015	14:57	2.940	9.246
04	AR12426C2	E2P0121F.D	5/7/2015	15:11	2.940	9.246
05	AR12422C2	E2P0122F.D	5/7/2015	15:26	2.939	9.245
06	AR12423C2	E2P0123F.D	5/7/2015	15:40	2.939	9.245
07	AR12424C2	E2P0124F.D	5/7/2015	15:55	2.939	9.245
08	AR12425C2	E2P0125F.D	5/7/2015	16:09	2.938	9.244
09	AR12481C2	E2P0126F.D	5/7/2015	16:24	2.939	9.246
10	AR12486C2	E2P0127F.D	5/7/2015	16:38	2.939	9.246
11	AR12482C2	E2P0128F.D	5/7/2015	16:53	2.939	9.245
12	AR12483C2	E2P0129F.D	5/7/2015	17:07	2.939	9.245
13	AR12484C2	E2P0130F.D	5/7/2015	17:22	2.938	9.244
14	AR12485C2	E2P0131F.D	5/7/2015	17:36	2.937	9.243
15	AR12541C2	E2P0132F.D	5/7/2015	17:51	2.939	9.245
16	AR12546C2	E2P0133F.D	5/7/2015	18:05	2.939	9.245
17	AR12542C2	E2P0134F.D	5/7/2015	18:19	2.937	9.243
18	AR12543C2	E2P0135F.D	5/7/2015	18:34	2.937	9.242
19	AR12544C2	E2P0136F.D	5/7/2015	18:48	2.937	9.242
20	AR12545C2	E2P0137F.D	5/7/2015	19:03	2.937	9.242
21	AR12623C2	E2P0138F.D	5/7/2015	19:17	2.937	9.242
22	AR12683C2	E2P0139F.D	5/7/2015	19:32	2.937	9.242
23	AR16601C2	E2P0140F.D	5/7/2015	19:46	2.937	9.243
24	AR16606C2	E2P0141F.D	5/7/2015	20:00	2.938	9.245
25	AR16602C2	E2P0142F.D	5/7/2015	20:15	2.937	9.243
26	AR16603C2	E2P0143F.D	5/7/2015	20:29	2.937	9.243
27	AR16604C2	E2P0144F.D	5/7/2015	20:44	2.937	9.242

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 05/07/2015 05/07/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>2.937</u>			DCB: <u>9.242</u>			
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT
28	AR16605C2	E2P0145F.D	5/7/2015	20:58	2.936	9.241
29	AR16603CA	E2P0147F.D	5/7/2015	21:27	2.937	9.243
30	AR12543CA	E2P0148F.D	5/7/2015	21:42	2.938	9.243
31	AR12483CA	E2P0150F.D	5/7/2015	22:11	2.939	9.245
32	MB-81958	E2P0152F.D	5/7/2015	22:39	2.937	9.240
33	LCS-81958	E2P0153F.D	5/7/2015	22:54	2.937	9.241
34	MW-4	E2P0154F.D	5/7/2015	23:08	2.938	9.242
35	DUP-X	E2P0155F.D	5/7/2015	23:23	2.937	9.241
36	MW-6	E2P0156F.D	5/7/2015	23:37	2.937	9.241
37	MW-2R	E2P0157F.D	5/7/2015	23:52	2.938	9.241
38	MW-3	E2P0158F.D	5/8/2015	0:06	2.938	9.241
39	MW-5	E2P0160F.D	5/8/2015	0:35	2.936	9.240
40	MW-7	E2P0161F.D	5/8/2015	0:50	2.937	9.241
41	MW-7MS	E2P0162F.D	5/8/2015	1:04	2.937	9.241
42	MW-7MSD	E2P0163F.D	5/8/2015	1:19	2.938	9.241
43	AR16603CB	E2P0175F.D	5/8/2015	4:13	2.937	9.242
44	AR12543CB	E2P0176F.D	5/8/2015	4:27	2.938	9.243
45	AR12483CB	E2P0178F.D	5/8/2015	4:56	2.937	9.242

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 05/07/2015 05/07/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: 3.623			DCB: 10.229			
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT
01	AR12213C2	E2P0118R.D	5/7/2015	14:28	3.625	10.231
02	AR12323C2	E2P0119R.D	5/7/2015	14:43	3.625	10.232
03	AR12421C2	E2P0120R.D	5/7/2015	14:57	3.628	10.233
04	AR12426C2	E2P0121R.D	5/7/2015	15:11	3.627	10.234
05	AR12422C2	E2P0122R.D	5/7/2015	15:26	3.626	10.232
06	AR12423C2	E2P0123R.D	5/7/2015	15:40	3.626	10.231
07	AR12424C2	E2P0124R.D	5/7/2015	15:55	3.625	10.231
08	AR12425C2	E2P0125R.D	5/7/2015	16:09	3.625	10.230
09	AR12481C2	E2P0126R.D	5/7/2015	16:24	3.626	10.233
10	AR12486C2	E2P0127R.D	5/7/2015	16:38	3.627	10.235
11	AR12482C2	E2P0128R.D	5/7/2015	16:53	3.626	10.232
12	AR12483C2	E2P0129R.D	5/7/2015	17:07	3.625	10.231
13	AR12484C2	E2P0130R.D	5/7/2015	17:22	3.624	10.229
14	AR12485C2	E2P0131R.D	5/7/2015	17:36	3.623	10.228
15	AR12541C2	E2P0132R.D	5/7/2015	17:51	3.626	10.231
16	AR12546C2	E2P0133R.D	5/7/2015	18:05	3.625	10.233
17	AR12542C2	E2P0134R.D	5/7/2015	18:19	3.625	10.230
18	AR12543C2	E2P0135R.D	5/7/2015	18:34	3.623	10.228
19	AR12544C2	E2P0136R.D	5/7/2015	18:48	3.623	10.228
20	AR12545C2	E2P0137R.D	5/7/2015	19:03	3.623	10.228
21	AR12623C2	E2P0138R.D	5/7/2015	19:17	3.624	10.229
22	AR12683C2	E2P0139R.D	5/7/2015	19:32	3.623	10.228
23	AR16601C2	E2P0140R.D	5/7/2015	19:46	3.624	10.231
24	AR16606C2	E2P0141R.D	5/7/2015	20:00	3.624	10.233
25	AR16602C2	E2P0142R.D	5/7/2015	20:15	3.623	10.230
26	AR16603C2	E2P0143R.D	5/7/2015	20:29	3.623	10.229
27	AR16604C2	E2P0144R.D	5/7/2015	20:44	3.623	10.229

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCLOL ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 05/07/2015 05/07/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>3.623</u>			DCB: <u>10.229</u>			
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT
28	AR16605C2	E2P0145R.D	5/7/2015	20:58	3.623	10.228
29	AR16603CA	E2P0147R.D	5/7/2015	21:27	3.623	10.230
30	AR12543CA	E2P0148R.D	5/7/2015	21:42	3.624	10.230
31	AR12483CA	E2P0150R.D	5/7/2015	22:11	3.624	10.231
32	MB-81958	E2P0152R.D	5/7/2015	22:39	3.624	10.228
33	LCS-81958	E2P0153R.D	5/7/2015	22:54	3.623	10.228
34	MW-4	E2P0154R.D	5/7/2015	23:08	3.623	10.229
35	DUP-X	E2P0155R.D	5/7/2015	23:23	3.623	10.228
36	MW-6	E2P0156R.D	5/7/2015	23:37	3.623	10.228
37	MW-2R	E2P0157R.D	5/7/2015	23:52	3.624	10.228
38	MW-3	E2P0158R.D	5/8/2015	0:06	3.624	10.229
39	MW-5	E2P0160R.D	5/8/2015	0:35	3.623	10.228
40	MW-7	E2P0161R.D	5/8/2015	0:50	3.623	10.228
41	MW-7MS	E2P0162R.D	5/8/2015	1:04	3.623	10.228
42	MW-7MSD	E2P0163R.D	5/8/2015	1:19	3.623	10.229
43	AR16603CB	E2P0175R.D	5/8/2015	4:13	3.624	10.230
44	AR12543CB	E2P0176R.D	5/8/2015	4:27	3.623	10.230
45	AR12483CB	E2P0178R.D	5/8/2015	4:56	3.624	10.229

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 05/12/2015 05/13/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>2.939</u>			DCB: <u>9.244</u>			
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213E2	E2P0393F.D	5/12/2015	17:42	2.940	9.245
02	AR12323E2	E2P0394F.D	5/12/2015	17:57	2.940	9.246
03	AR12421E2	E2P0395F.D	5/12/2015	18:11	2.940	9.246
04	AR12426E2	E2P0396F.D	5/12/2015	18:26	2.941	9.248
05	AR12422E2	E2P0397F.D	5/12/2015	18:41	2.940	9.246
06	AR12423E2	E2P0398F.D	5/12/2015	18:55	2.939	9.245
07	AR12424E2	E2P0399F.D	5/12/2015	19:09	2.939	9.244
08	AR12425E2	E2P0400F.D	5/12/2015	19:24	2.939	9.243
09	AR12481E2	E2P0401F.D	5/12/2015	19:38	2.940	9.247
10	AR12486E2	E2P0402F.D	5/12/2015	19:53	2.940	9.247
11	AR12482E2	E2P0403F.D	5/12/2015	20:08	2.939	9.246
12	AR12483E2	E2P0404F.D	5/12/2015	20:22	2.939	9.244
13	AR12484E2	E2P0405F.D	5/12/2015	20:37	2.939	9.244
14	AR12485E2	E2P0406F.D	5/12/2015	20:52	2.938	9.244
15	AR12541E2	E2P0407F.D	5/12/2015	21:07	2.940	9.246
16	AR12546E2	E2P0408F.D	5/12/2015	21:21	2.940	9.246
17	AR12542E2	E2P0409F.D	5/12/2015	21:36	2.940	9.245
18	AR12543E2	E2P0410F.D	5/12/2015	21:51	2.939	9.245
19	AR12544E2	E2P0411F.D	5/12/2015	22:05	2.938	9.243
20	AR12545E2	E2P0412F.D	5/12/2015	22:20	2.938	9.243
21	AR12623E2	E2P0413F.D	5/12/2015	22:35	2.939	9.244
22	AR12683E2	E2P0414F.D	5/12/2015	22:49	2.939	9.243
23	AR16601E2	E2P0415F.D	5/12/2015	23:04	2.939	9.246
24	AR16606E2	E2P0416F.D	5/12/2015	23:19	2.940	9.247
25	AR16602E2	E2P0417F.D	5/12/2015	23:34	2.939	9.245
26	AR16603E2	E2P0418F.D	5/12/2015	23:48	2.939	9.243
27	AR16604E2	E2P0419F.D	5/13/2015	0:03	2.939	9.244

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
GC Column: CLPPest ID: 0.53 (mm) Init. Calib. Date(s): 05/12/2015 05/13/2015
Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>2.939</u>			DCB: <u>9.244</u>			
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
28	AR16605E2	E2P0420F.D	5/13/2015	0:17	2.938	9.243
29	AR16603ED	E2P0462F.D	5/13/2015	11:06	2.940	9.243
30	AR12483ED	E2P0463F.D	5/13/2015	11:20	2.940	9.244
31	MW-1	E2P0464F.D	5/13/2015	11:37	*	*
32	AR16603EE	E2P0466F.D	5/13/2015	12:06	2.940	9.243
33	AR12483EE	E2P0467F.D	5/13/2015	12:21	2.941	9.245

QC LIMITS
(± 0.05 MINUTES)
(± 0.10 MINUTES)

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCLOL ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 05/12/2015 05/13/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>3.624</u>			DCB: <u>10.231</u>			
	EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	AR12213E2	E2P0393R.D	5/12/2015	17:42	3.624	10.232
02	AR12323E2	E2P0394R.D	5/12/2015	17:57	3.625	10.232
03	AR12421E2	E2P0395R.D	5/12/2015	18:11	3.626	10.233
04	AR12426E2	E2P0396R.D	5/12/2015	18:26	3.626	10.234
05	AR12422E2	E2P0397R.D	5/12/2015	18:41	3.626	10.232
06	AR12423E2	E2P0398R.D	5/12/2015	18:55	3.625	10.232
07	AR12424E2	E2P0399R.D	5/12/2015	19:09	3.625	10.230
08	AR12425E2	E2P0400R.D	5/12/2015	19:24	3.624	10.229
09	AR12481E2	E2P0401R.D	5/12/2015	19:38	3.626	10.233
10	AR12486E2	E2P0402R.D	5/12/2015	19:53	3.625	10.234
11	AR12482E2	E2P0403R.D	5/12/2015	20:08	3.624	10.232
12	AR12483E2	E2P0404R.D	5/12/2015	20:22	3.623	10.231
13	AR12484E2	E2P0405R.D	5/12/2015	20:37	3.623	10.230
14	AR12485E2	E2P0406R.D	5/12/2015	20:52	3.623	10.230
15	AR12541E2	E2P0407R.D	5/12/2015	21:07	3.624	10.232
16	AR12546E2	E2P0408R.D	5/12/2015	21:21	3.626	10.233
17	AR12542E2	E2P0409R.D	5/12/2015	21:36	3.624	10.231
18	AR12543E2	E2P0410R.D	5/12/2015	21:51	3.624	10.231
19	AR12544E2	E2P0411R.D	5/12/2015	22:05	3.623	10.230
20	AR12545E2	E2P0412R.D	5/12/2015	22:20	3.623	10.230
21	AR12623E2	E2P0413R.D	5/12/2015	22:35	3.624	10.231
22	AR12683E2	E2P0414R.D	5/12/2015	22:49	3.624	10.230
23	AR16601E2	E2P0415R.D	5/12/2015	23:04	3.624	10.233
24	AR16606E2	E2P0416R.D	5/12/2015	23:19	3.624	10.233
25	AR16602E2	E2P0417R.D	5/12/2015	23:34	3.624	10.232
26	AR16603E2	E2P0418R.D	5/12/2015	23:48	3.625	10.230
27	AR16604E2	E2P0419R.D	5/13/2015	0:03	3.624	10.231

QC LIMITS

TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
 DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag RT values with an asterisk.

8H - FORM VIII ARO
AROCOR ANALYTICAL SEQUENCE

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 GC Column: CLPPestII ID: 0.53 (mm) Init. Calib. Date(s): 05/12/2015 05/13/2015
 Instrument ID: E2

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs, AND LCSs IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: <u>3.624</u>			DCB: <u>10.231</u>			
EPA SAMPLE NO.	LAB File ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT
28	AR16605E2	E2P0420R.D	5/13/2015	0:17	3.623	10.229
29	AR16603ED	E2P0462R.D	5/13/2015	11:06	3.625	10.232
30	AR12483ED	E2P0463R.D	5/13/2015	11:20	3.627	10.231
31	MW-1	E2P0464R.D	5/13/2015	11:37	*	*
32	AR16603EE	E2P0466R.D	5/13/2015	12:06	3.627	10.231
33	AR12483EE	E2P0467R.D	5/13/2015	12:21	3.626	10.232

QC LIMITS
 (± 0.05 MINUTES)
 (± 0.10 MINUTES)

TCX = Tetrachloro-m-xylene
 DCB = Decachlorobiphenyl

Column used to flag RT values with an asterisk.

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

LCS-81958

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab Sample ID: LCS-81958 Date(s) Analyzed: 05/07/2015 05/07/2015
Instrument ID (1): E2 Instrument ID (2): E2
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1016	1	3.857	3.787	3.927	0.3325	0.400543	
	2	4.532	4.467	4.607	0.4743		
	3	5.552	5.483	5.623	0.3948		
	4						
	5						
COLUMN 1	1	5.103	5.033	5.173	0.3419	0.370258	8.2
	2	5.873	5.805	5.945	0.3934		
	3	6.683	6.614	6.754	0.3755		
	4						
	5						
COLUMN 2	1	7.290	7.225	7.365	0.3904	0.380296	
	2	7.562	7.500	7.640	0.3838		
	3	8.157	8.092	8.232	0.3667		
	4						
	5						
Aroclor-1260	1	7.970	7.902	8.042	0.3572	0.366951	3.6
	2	8.452	8.385	8.525	0.3760		
	3	8.961	8.893	9.033	0.3676		
	4						
	5						
COLUMN 1	1					0.366951	3.6
	2						
	3						
	4						
	5						
COLUMN 2	1					0.366951	3.6
	2						
	3						
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab Sample ID: P0667-01A Date(s) Analyzed: 05/07/2015 05/07/2015
Instrument ID (1): E2 Instrument ID (2): E2
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1248	1	6.073	6.004	6.144	0.6504	0.602449	
	2	6.335	6.269	6.409	0.5819		
	3	6.801	6.737	6.877	0.5751		
	4						
	5						
COLUMN 1	1	7.045	6.979	7.119	0.6358	0.563328	6.9
	2	7.158	7.089	7.229	0.5453		
	3	7.795	7.730	7.870	0.5089		
	4						
	5						
COLUMN 2	1	6.801	6.734	6.874	0.1852	0.214510	
	2	6.924	6.850	6.990	0.2309		
	3	7.107	7.044	7.184	0.2275		
	4						
	5						
Aroclor-1254	1	7.686	7.618	7.758	0.1878	0.126497	69.6
	2	7.960	7.902	8.042	0.0981		
	3	8.305	8.222	8.362	0.0936		
	4						
	5						
COLUMN 1	1					0.126497	69.6
	2						
	3						
	4						
	5						
COLUMN 2	1					0.126497	69.6
	2						
	3						
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

DUP-X

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab Sample ID: P0667-02A Date(s) Analyzed: 05/07/2015 05/07/2015
Instrument ID (1): E2 Instrument ID (2): E2
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1248	1	6.073	6.004	6.144	0.5014	0.458146	1.2
	2	6.336	6.269	6.409	0.4541		
	3	6.802	6.737	6.877	0.4189		
	4						
	5						
COLUMN 1	1	7.045	6.979	7.119	0.5234	0.463809	1.2
	2	7.159	7.089	7.229	0.4497		
	3	7.796	7.730	7.870	0.4183		
	4						
	5						
COLUMN 2	1	6.802	6.734	6.874	0.1349	0.128261	24.4
	2	6.923	6.850	6.990	0.1324		
	3	7.108	7.044	7.184	0.1175		
	4						
	5						
Aroclor-1254	1	7.686	7.618	7.758	0.1552	0.103080	24.4
	2	7.960	7.902	8.042	0.0796		
	3	8.306	8.222	8.362	0.0745		
	4						
	5						
COLUMN 1	1					0.103080	24.4
	2						
	3						
	4						
	5						
COLUMN 2	1					0.103080	24.4
	2						
	3						
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
 Lab Sample ID: P0667-06A Date(s) Analyzed: 05/13/2015 05/13/2015
 Instrument ID (1): E2 Instrument ID (2): E2
 GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1248 COLUMN 1	1	6.085	6.008	6.148	133.5378	123.727603	
	2	6.340	6.269	6.409	128.6682		
	3	6.806	6.737	6.877	108.9768		
	4						
	5						
COLUMN 2	1	7.048	6.980	7.120	151.5723	133.978813	8.3
	2	7.161	7.090	7.230	134.6738		
	3	7.797	7.730	7.870	115.6904		
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MW-7MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab Sample ID: P0667-08AMSD Date(s) Analyzed: 05/08/2015 05/08/2015
Instrument ID (1): E2 Instrument ID (2): E2
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1016	1	3.858	3.787	3.927	0.3367	0.380890	
	2	4.534	4.467	4.607	0.4715		
	3	5.552	5.483	5.623	0.3345		
	4						
	5						
COLUMN 1	1	5.103	5.033	5.173	0.3618	0.404853	6.3
	2	5.873	5.805	5.945	0.4341		
	3	6.683	6.614	6.754	0.4187		
	4						
	5						
COLUMN 2	1	7.291	7.225	7.365	0.3468	0.340339	
	2	7.563	7.500	7.640	0.3484		
	3	8.158	8.092	8.232	0.3259		
	4						
	5						
Aroclor-1260	1	7.971	7.902	8.042	0.3608	0.370773	8.9
	2	8.453	8.385	8.525	0.3942		
	3	8.962	8.893	9.033	0.3574		
	4						
	5						
COLUMN 1	1					0.370773	8.9
	2						
	3						
	4						
	5						
COLUMN 2	1					0.370773	8.9
	2						
	3						
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

10C - FORM X ARO
IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

MW-7MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Lab Sample ID: P0667-08AMS Date(s) Analyzed: 05/08/2015 05/08/2015
Instrument ID (1): E2 Instrument ID (2): E2
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (MM)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION		%D
			FROM	TO	PEAK	MEAN	
Aroclor-1016	1	3.857	3.787	3.927	0.3394	0.516736	
	2	4.499	4.467	4.607	0.7589		
	3	5.551	5.483	5.623	0.4520		
	4						
	5						
COLUMN 1	1	5.101	5.033	5.173	0.3539	0.425313	21.5
	2	5.872	5.805	5.945	0.4497		
	3	6.683	6.614	6.754	0.4723		
	4						
	5						
COLUMN 2	1	7.291	7.225	7.365	0.3047	0.301280	
	2	7.563	7.500	7.640	0.3095		
	3	8.158	8.092	8.232	0.2897		
	4						
	5						
Aroclor-1260	1	7.970	7.902	8.042	0.3108	0.315364	4.7
	2	8.453	8.385	8.525	0.3341		
	3	8.961	8.893	9.033	0.3012		
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks for each column are required for identification of multicomponent analytes

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0118F.D
 Lab Smp Id: AR12213C2 Client Smp ID: AR12213C2
 Inj Date : 07-MAY-2015 14:28
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12213C2,AR12213C2,,ar1221.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 1 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1221.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====							
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
2.938	2.936	0.002	15787 0.02000	0.021		(a)	

3	Aroclor-1221		CAS #: 11104-28-2				
2.393	2.393	0.000	3046 0.40000	0.40	80.00- 120.00	100.00(a)	
3.156	3.156	0.000	2661 0.40000	0.40	67.36- 107.36	87.36	
3.389	3.389	0.000	6040 0.40000	0.40	178.29- 218.29	198.29	
Average of Peak Amounts =			0.40000				

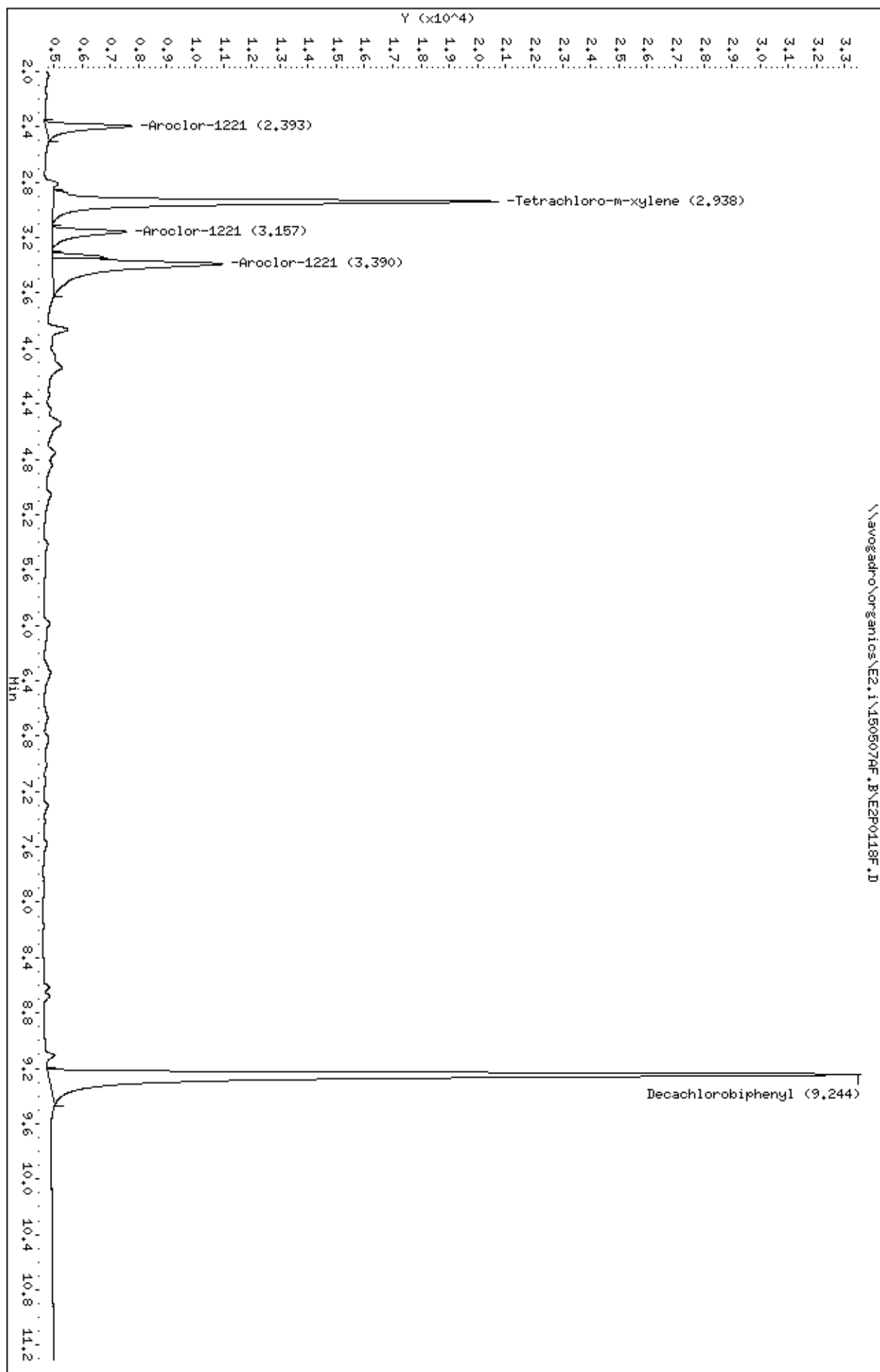
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
9.244	9.241	0.003	862924 0.04000	0.038		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0118F.D
Date : 07-MAY-2015 14:28
Client ID: AR1221302
Sample Info: AR1221302,AR1221302,,ar1221.sub,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0118R.D
Lab Smp Id: AR12213C2 Client Smp ID: AR12213C2
Inj Date : 07-MAY-2015 14:28
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12213C2,AR12213C2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.624	3.623	0.001	11079 0.02000	0.020		(a)

2	Aroclor-1221		CAS #: 11104-28-2			
3.005	3.005	0.000	2292 0.40000	0.40	80.00- 120.00	100.00(a)
4.084	4.084	0.000	1749 0.40000	0.40	56.31- 96.31	76.31
4.412	4.412	0.000	3873 0.40000	0.40	148.98- 188.98	168.98
Average of Peak Amounts =			0.40000			

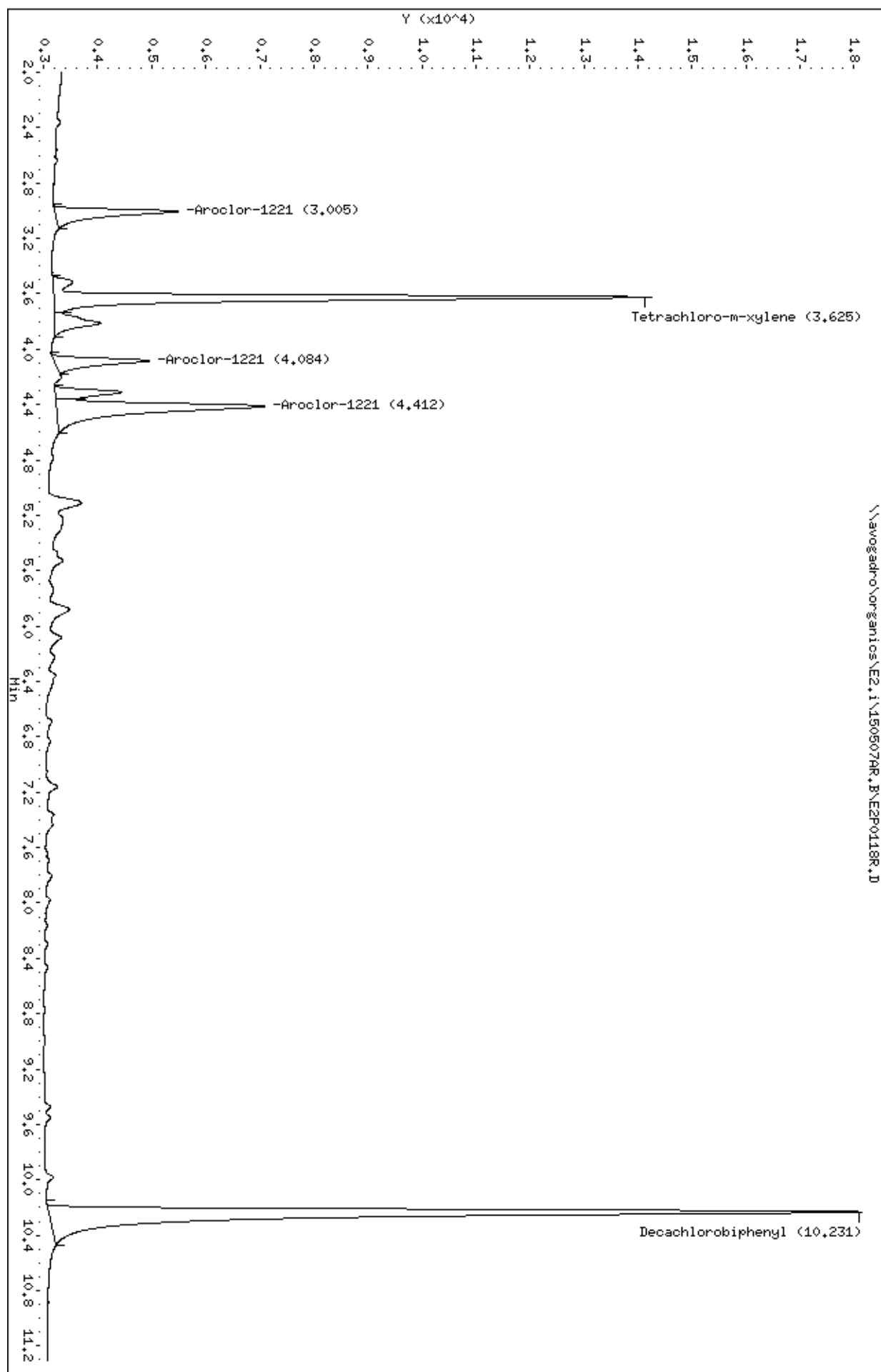
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.231	10.227	0.004	15059 0.04000	0.034		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0118R.D
Date : 07-MAY-2015 14:28
Client ID: AR1221302
Sample Info: AR1221302,AR1221302,,ar1221,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0119F.D
 Lab Smp Id: AR12323C2 Client Smp ID: AR12323C2
 Inj Date : 07-MAY-2015 14:43
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12323C2,AR12323C2,,ar1232.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 2 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1232.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.938	2.936	0.002	15760	0.02000	0.020		(a)	

4 Aroclor-1232					CAS #: 11141-16-5			
3.157	3.157	0.000	1857	0.40000	0.40	80.00- 120.00	100.00(a)	
3.860	3.860	0.000	4507	0.40000	0.40	222.70- 262.70	242.70	
4.140	4.140	0.000	2284	0.40000	0.40	102.99- 142.99	122.99	
Average of Peak Amounts =					0.40000			

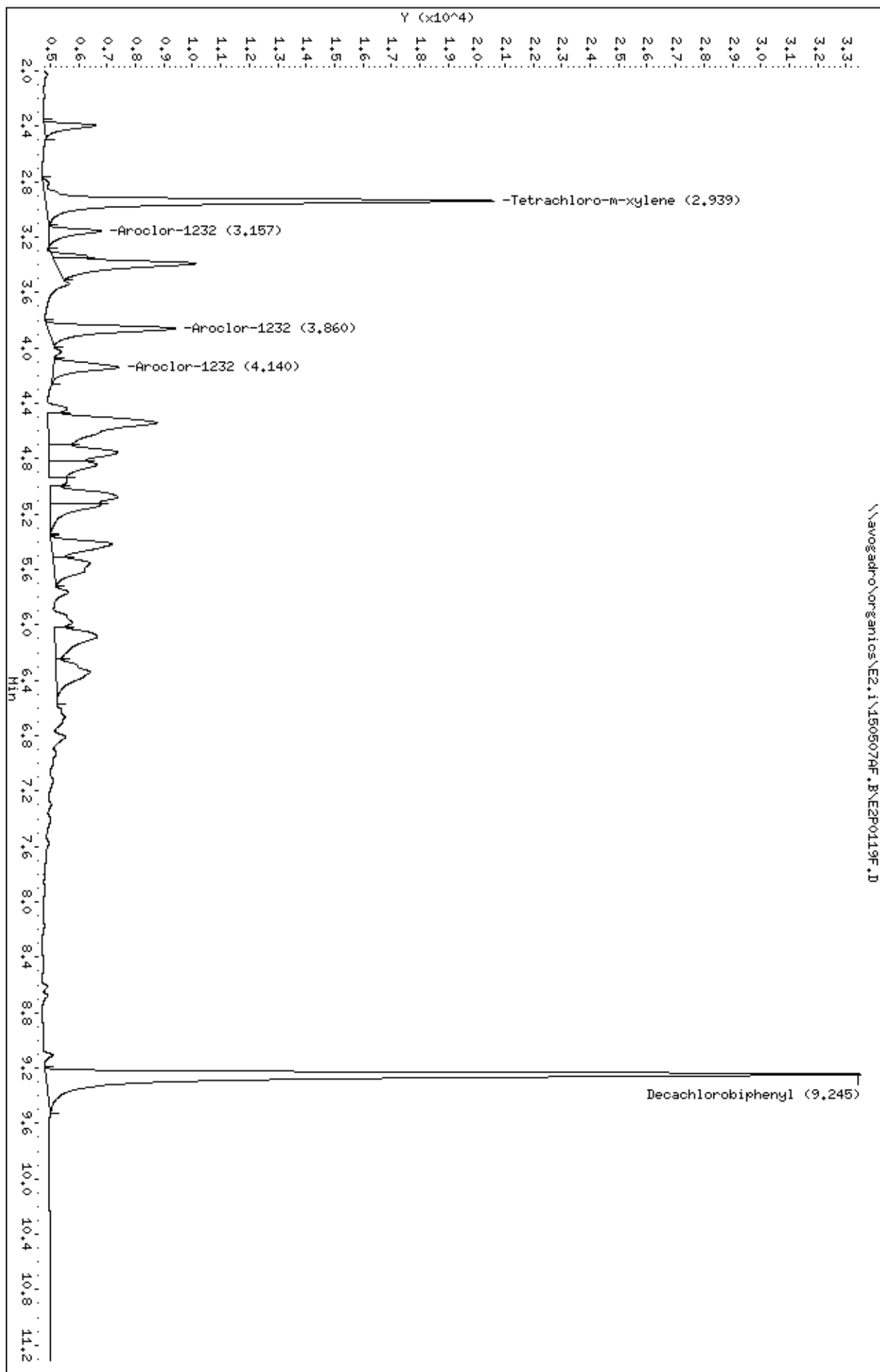
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.245	9.241	0.004	874587	0.04000	0.039		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0119F.D
 Date : 07-MAY-2015 14:43
 Client ID: AR1232302
 Sample Info: AR1232302,AR1232302,,ar1232,sub,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0119R.D
 Lab Smp Id: AR12323C2 Client Smp ID: AR12323C2
 Inj Date : 07-MAY-2015 14:43
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12323C2,AR12323C2,,ar1232.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
 Als bottle: 2 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1232.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	10944 0.02000	0.020		(a)

3	Aroclor-1232		CAS #: 11141-16-5			
4.312	4.312	0.000	977 0.40000	0.40	80.00- 120.00	100.00(a)
5.106	5.106	0.000	3086 0.40000	0.40	295.86- 335.86	315.86
5.525	5.525	0.000	1475 0.40000	0.40	130.97- 170.97	150.97
Average of Peak Amounts =			0.40000			

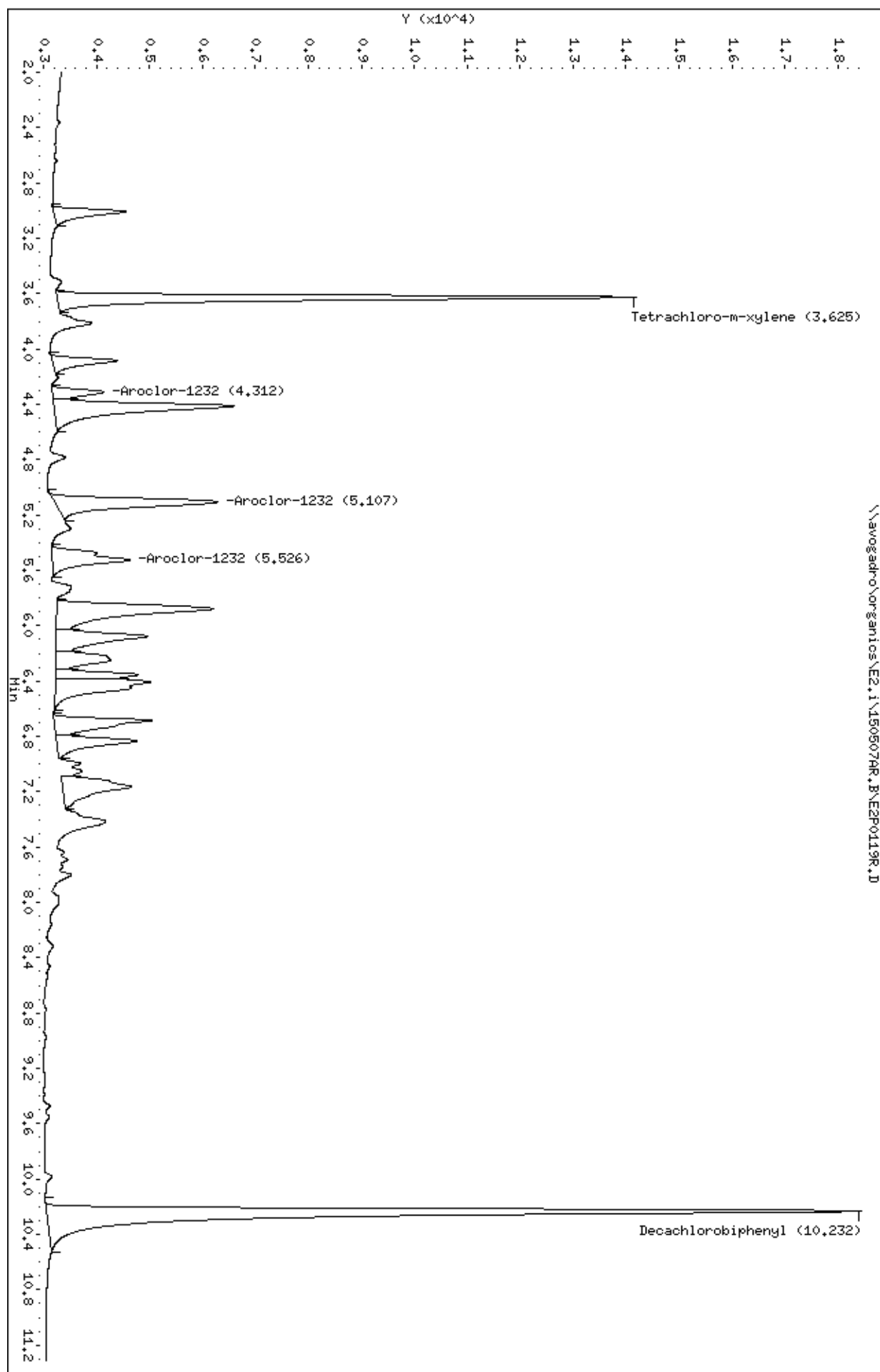
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.231	10.227	0.004	15391 0.04000	0.034		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0119R.D
Date : 07-MAY-2015 14:43
Client ID: AR1232302
Sample Info: AR1232302,AR1232302,,ar1232,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0120F.D
 Lab Smp Id: AR12421C2 Client Smp ID: AR12421C2
 Inj Date : 07-MAY-2015 14:57
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12421C2,AR12421C2,,ar1242.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140F.D
 Als bottle: 3 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.939	2.936	0.003	3956 0.00500	0.0052		(a)

6	Aroclor-1242		CAS #: 53469-21-9			
4.842	4.841	0.001	775 0.10000	0.10	80.00- 120.00	100.00(a)
5.556	5.554	0.002	694 0.10000	0.098	66.91- 106.91	89.55
6.081	6.078	0.003	806 0.10000	0.092	105.37- 145.37	104.00
Average of Peak Amounts =			0.09667			

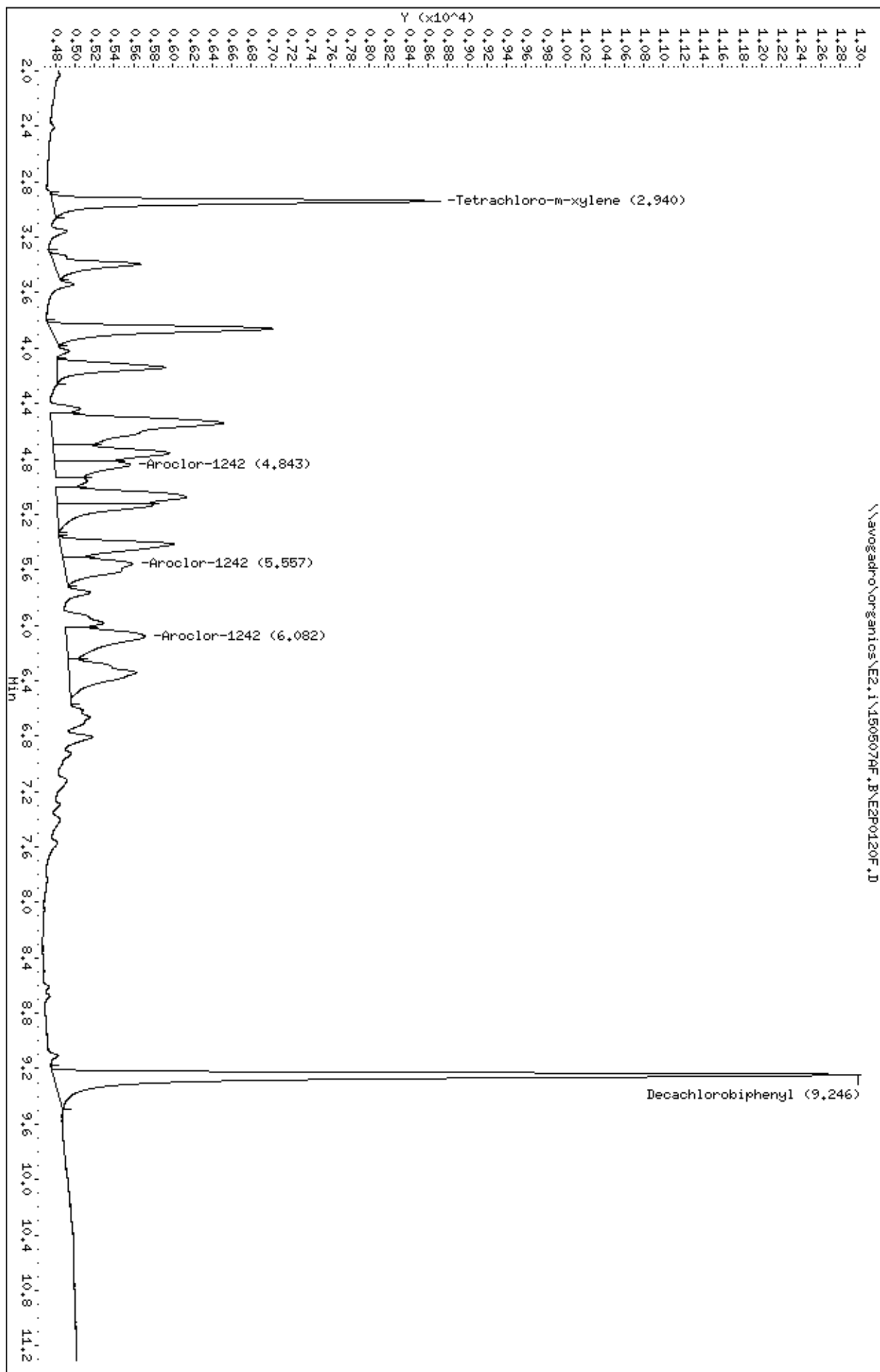
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.245	9.241	0.004	243488 0.01000	0.011		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0120F.D
 Date : 07-MAY-2015 14:57
 Client ID: AR12421C2
 Sample Info: AR12421C2,AR12421C2,,ar1242,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0120R.D
Lab Smp Id: AR12421C2 Client Smp ID: AR12421C2
Inj Date : 07-MAY-2015 14:57
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12421C2,AR12421C2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140R.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.627	3.623	0.004	2516 0.00500	0.0046		(a)

4 Aroclor-1242 CAS #: 53469-21-9						
5.880	5.875	0.005	1349 0.10000	0.094	80.00- 120.00	100.00(a)
6.078	6.073	0.005	803 0.10000	0.096	37.27- 77.27	59.53
6.408	6.405	0.003	970 0.10000	0.10	43.14- 83.14	71.91
Average of Peak Amounts =			0.09667			

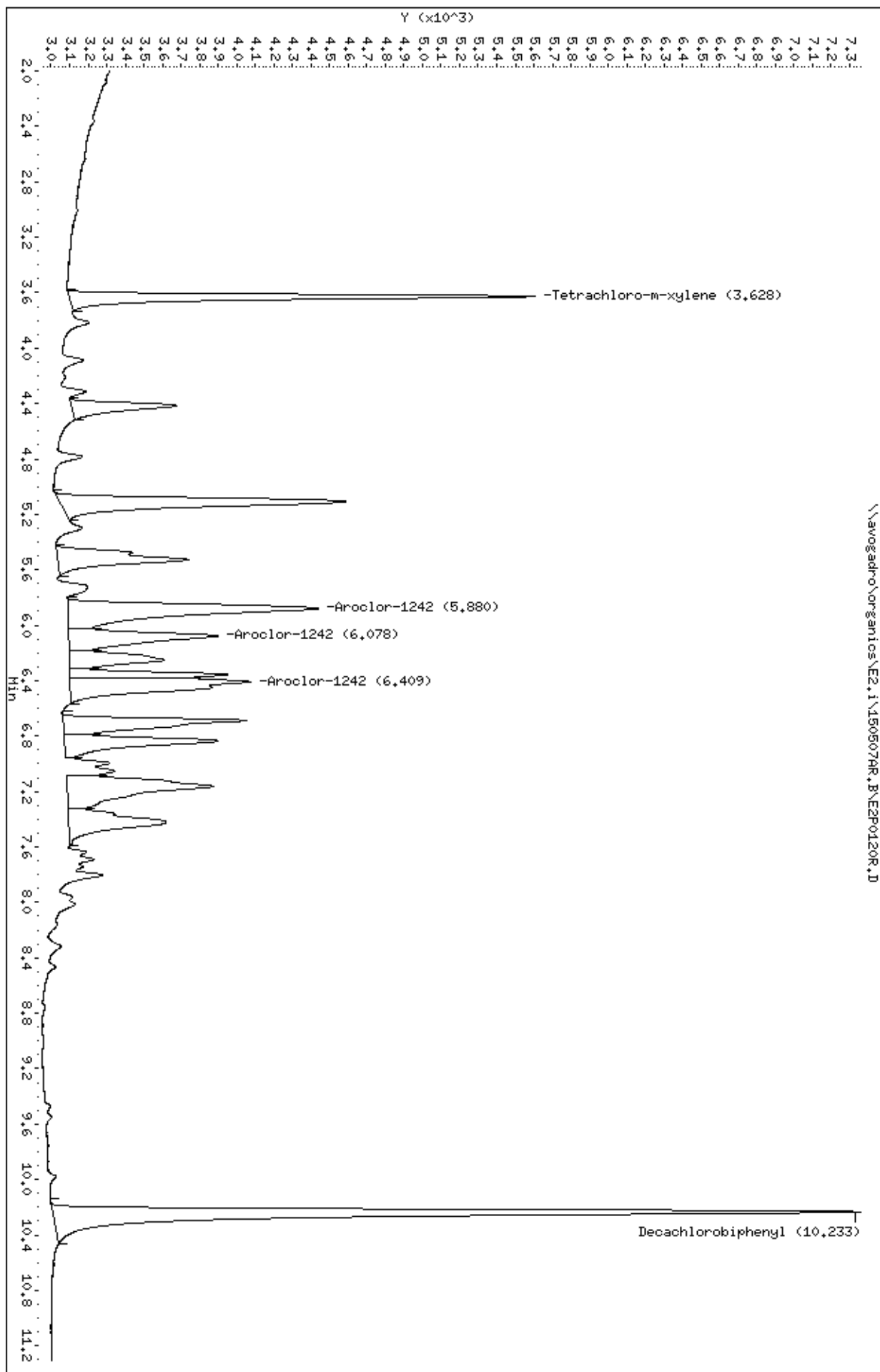
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.233	10.227	0.006	4348 0.01000	0.010		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0120R.D
Date : 07-MAY-2015 14:57
Client ID: AR12421C2
Sample Info: AR12421C2,AR12421C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0121F.D
 Lab Smp Id: AR12426C2 Client Smp ID: AR12426C2
 Inj Date : 07-MAY-2015 15:11
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12426C2,AR12426C2,,ar1242.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141F.D
 Als bottle: 4 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.939	2.936	0.003	1984 0.00000	0.0026		(a)

6	Aroclor-1242		CAS #: 53469-21-9			
4.843	4.841	0.002	375 0.05000	0.049	80.00- 120.00	100.00(a)
5.557	5.554	0.003	357 0.05000	0.050	66.91- 106.91	95.20
6.084	6.078	0.006	380 0.05000	0.044	105.37- 145.37	101.33
Average of Peak Amounts =			0.04767			

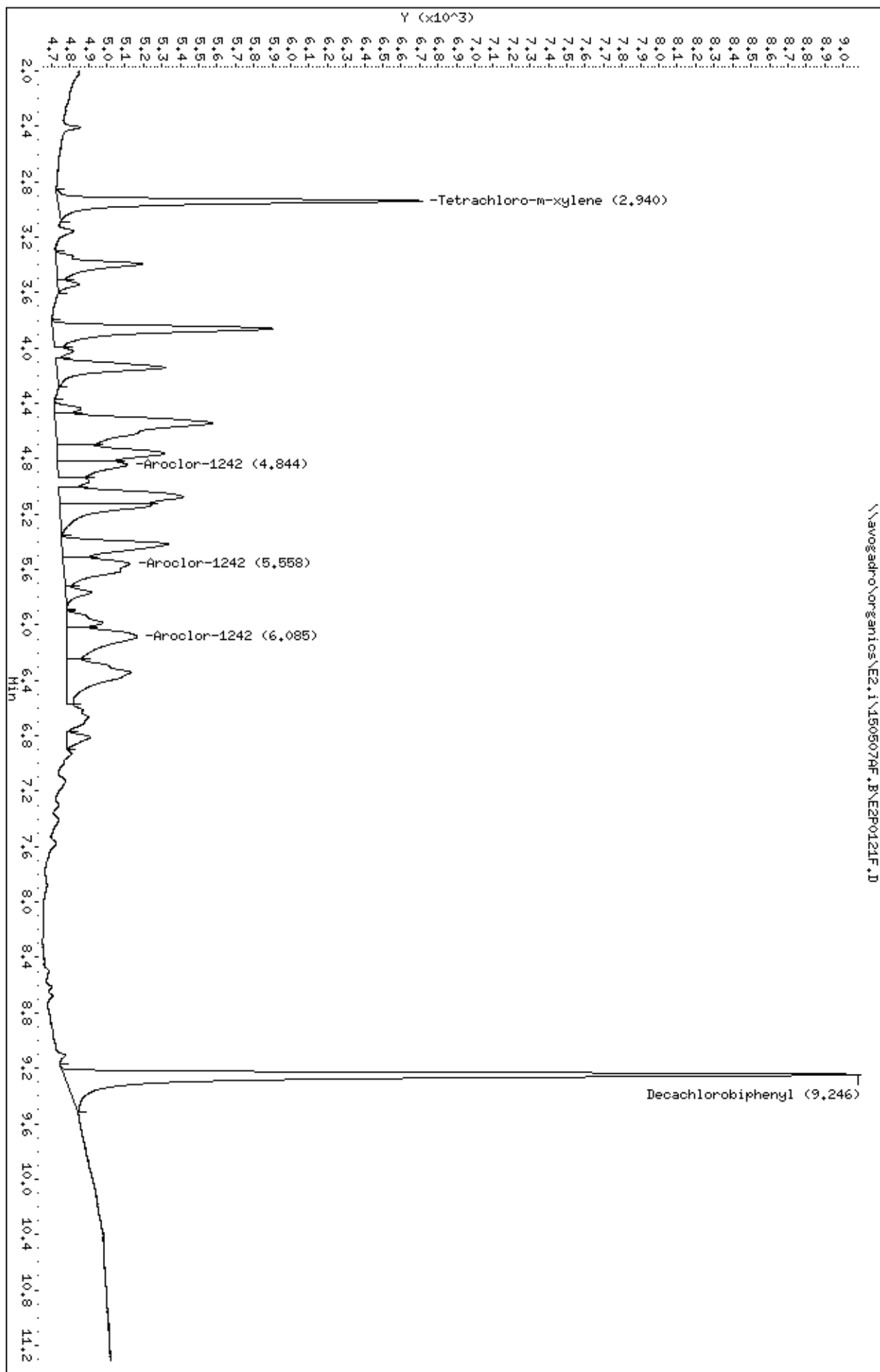
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.246	9.241	0.005	129224 0.00000	0.0058		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0121F.D
Date : 07-MAY-2015 15:11
Client ID: AR12426C2
Sample Info: AR12426C2,AR12426C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0121R.D
Lab Smp Id: AR12426C2 Client Smp ID: AR12426C2
Inj Date : 07-MAY-2015 15:11
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12426C2,AR12426C2,,ar1242.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141R.D
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.626	3.623	0.003	1217 0.00000	0.0022		(a)

4 Aroclor-1242 CAS #: 53469-21-9						
5.880	5.875	0.005	652 0.05000	0.046	80.00- 120.00	100.00(a)
6.078	6.073	0.005	394 0.05000	0.048	37.27- 77.27	60.43
6.408	6.405	0.003	487 0.05000	0.051	43.14- 83.14	74.69
Average of Peak Amounts =			0.04833			

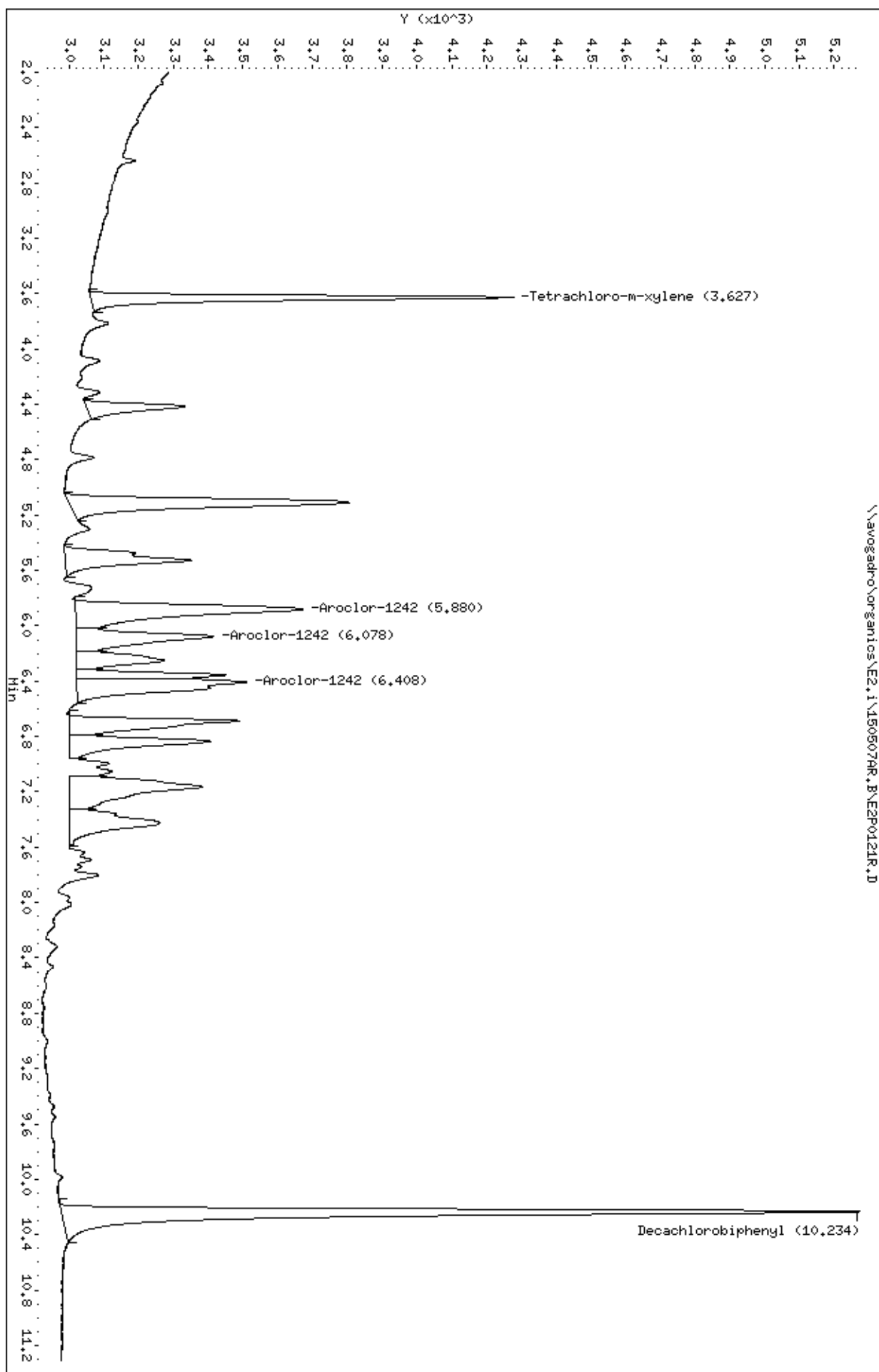
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.234	10.227	0.007	2295 0.00000	0.0053		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0121R.D
Date : 07-MAY-2015 15:11
Client ID: AR12426C2
Sample Info: AR12426C2,AR12426C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0122F.D
Lab Smp Id: AR12422C2 Client Smp ID: AR12422C2
Inj Date : 07-MAY-2015 15:26
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12422C2,AR12422C2,,ar1242.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142F.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.939	2.936	0.003	7748 0.01000	0.010		(a)

6 Aroclor-1242 CAS #: 53469-21-9						
4.842	4.841	0.001	1520 0.20000	0.20	80.00- 120.00	100.00(a)
5.557	5.554	0.003	1409 0.20000	0.20	66.91- 106.91	92.70
6.081	6.078	0.003	1614 0.20000	0.19	105.37- 145.37	106.18
Average of Peak Amounts =			0.19667			

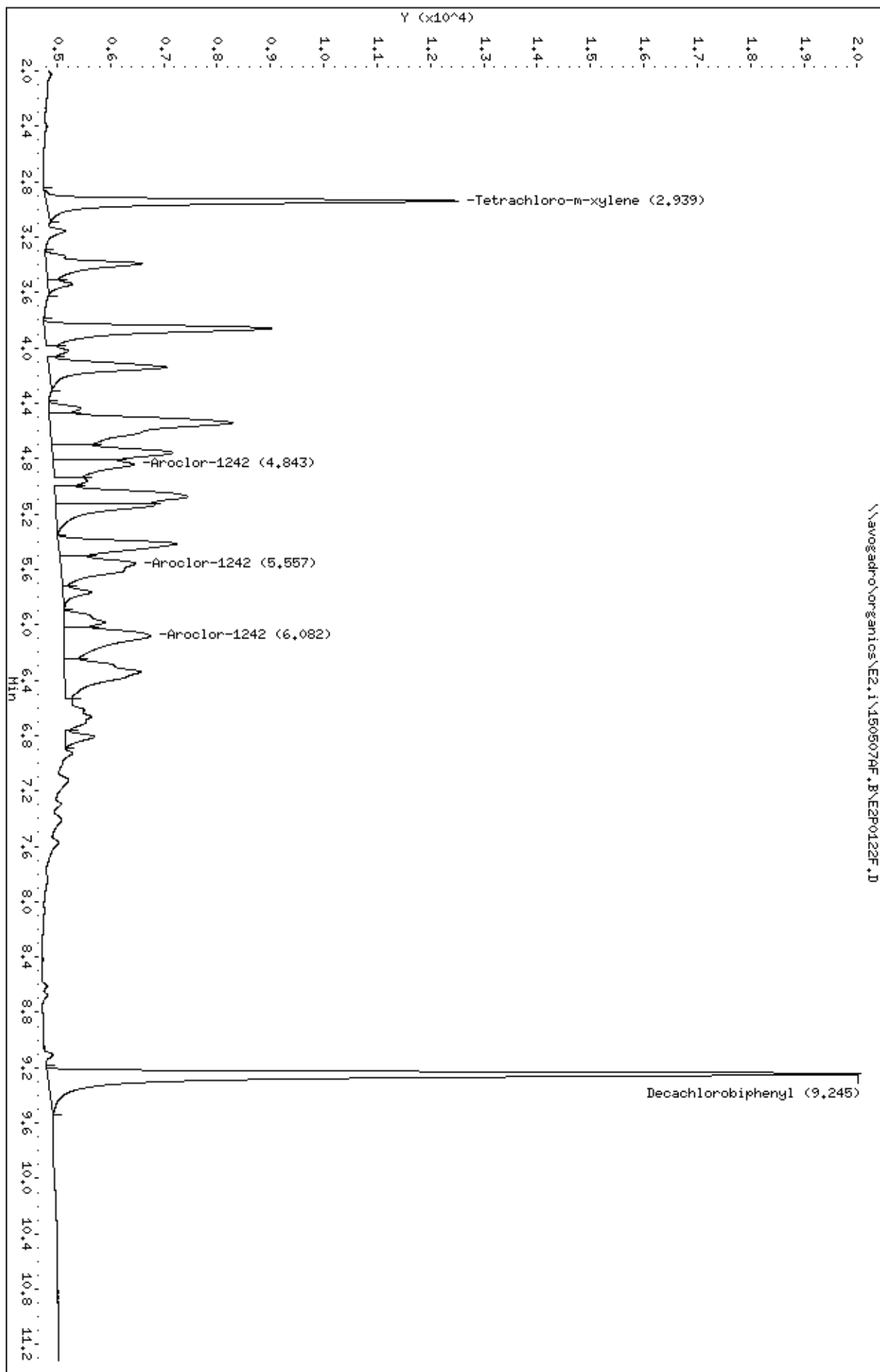
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.245	9.241	0.004	462287 0.02000	0.021		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AF.B\EP0122F.D
Date : 07-MAY-2015 15:26
Client ID: AR12422C2
Sample Info: AR12422C2,AR12422C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0122R.D
 Lab Smp Id: AR12422C2 Client Smp ID: AR12422C2
 Inj Date : 07-MAY-2015 15:26
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12422C2,AR12422C2,,ar1242.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142R.D
 Als bottle: 5 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO		
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8				
3.626	3.623	0.003	5179 0.01000	0.0095				(a)

4 Aroclor-1242				CAS #: 53469-21-9				
5.879	5.875	0.004	2765 0.20000	0.19	80.00-	120.00	100.00	(a)
6.077	6.073	0.004	1657 0.20000	0.20	37.27-	77.27	59.93	
6.407	6.405	0.002	1941 0.20000	0.20	43.14-	83.14	70.20	
Average of Peak Amounts =				0.19667				

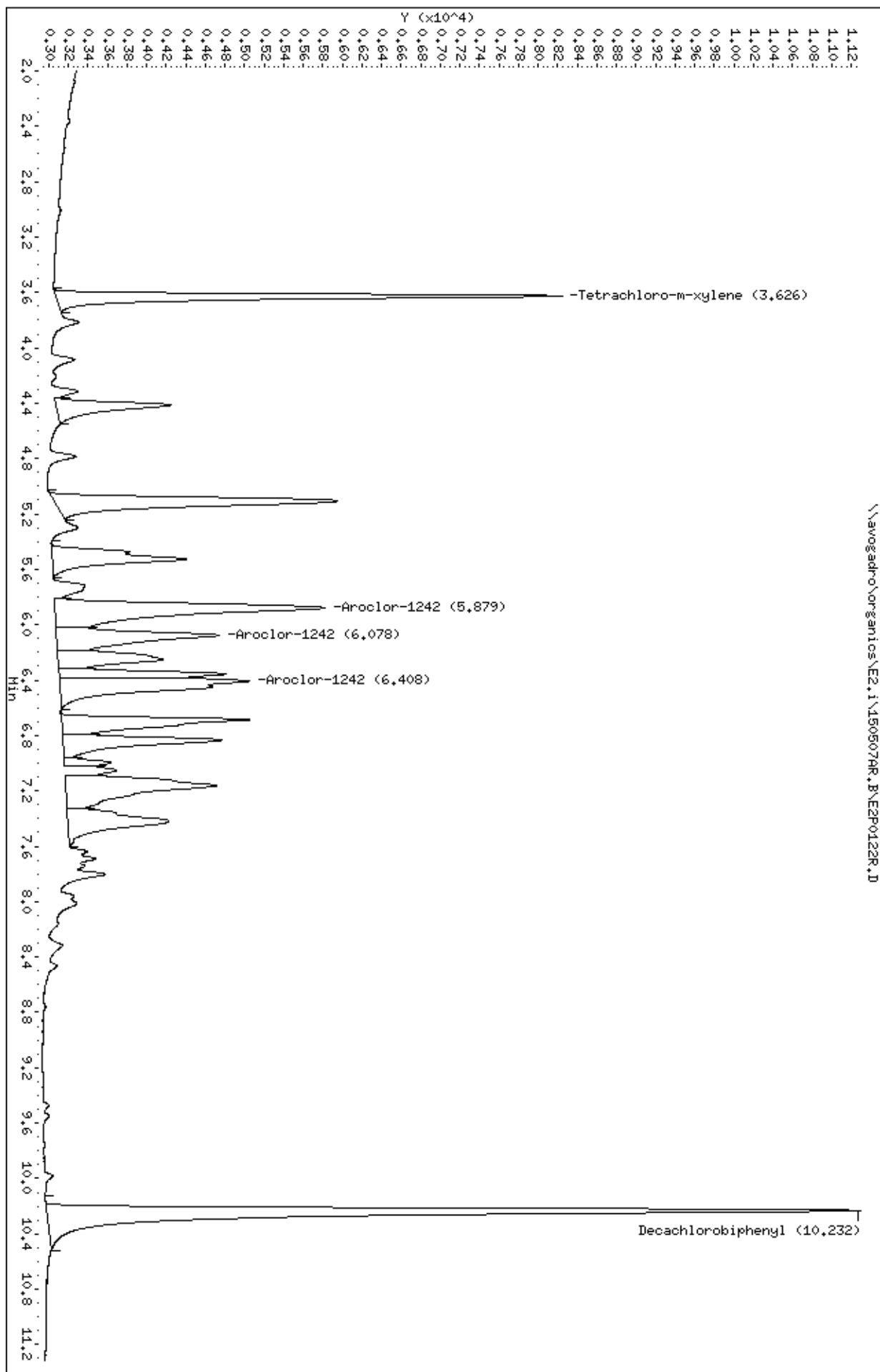
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3				
10.232	10.227	0.005	8322 0.02000	0.020				(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0122R.D
Date: 07-MAY-2015 15:26
Client ID: AR12422C2
Sample Info: AR12422C2,AR12422C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0123F.D
 Lab Smp Id: AR12423C2 Client Smp ID: AR12423C2
 Inj Date : 07-MAY-2015 15:40
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12423C2,AR12423C2,,ar1242.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 6 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.938	2.936	0.002	15979 0.02000	0.021		(a)

6	Aroclor-1242		CAS #: 53469-21-9			
4.842	4.841	0.001	3169 0.40000	0.41	80.00- 120.00	100.00(a)
5.556	5.554	0.002	2983 0.40000	0.41	66.91- 106.91	94.13
6.081	6.078	0.003	3640 0.40000	0.42	105.37- 145.37	114.86
Average of Peak Amounts =			0.41333			

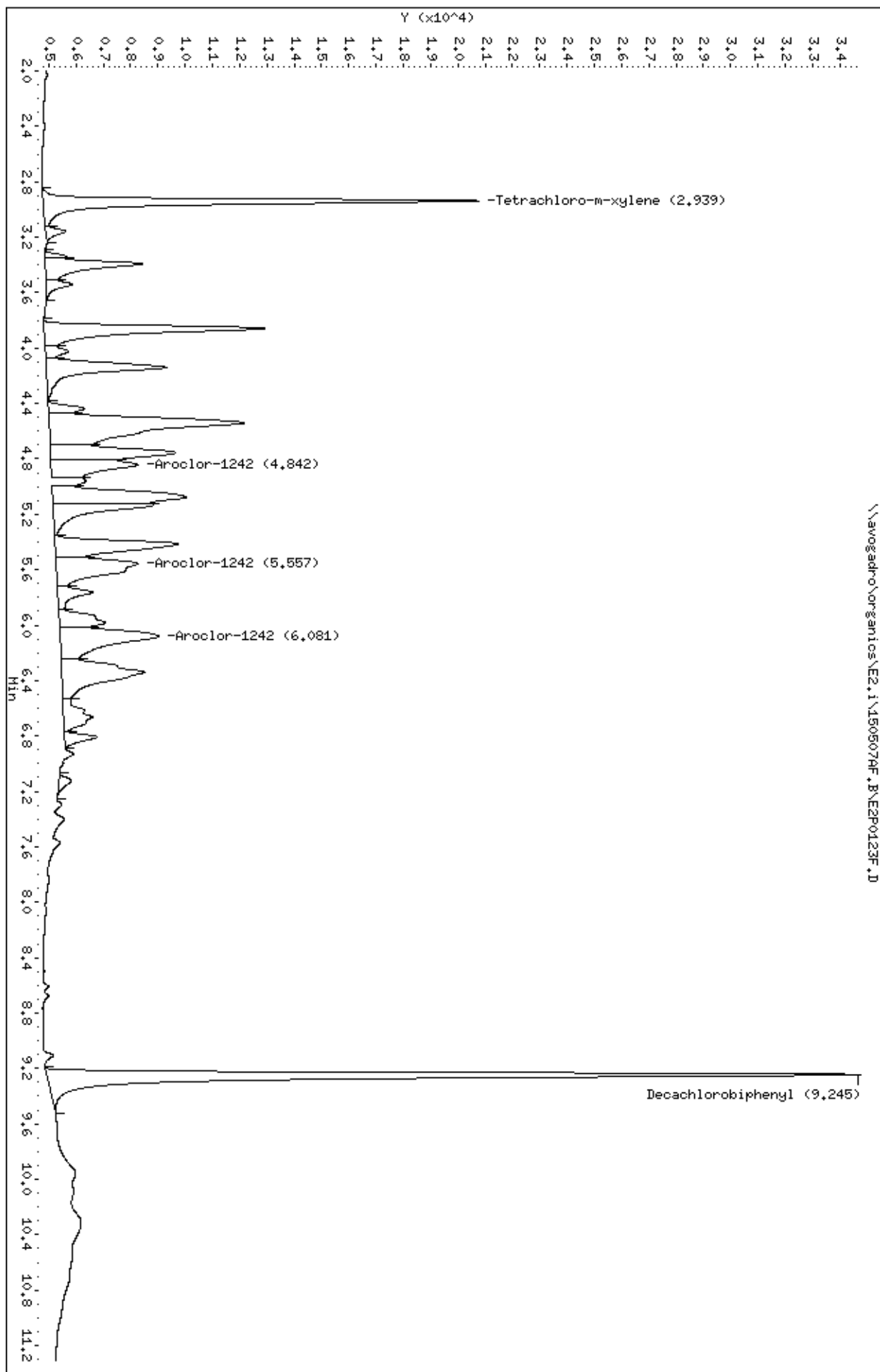
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.244	9.241	0.003	892434 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0123F.D
Date : 07-MAY-2015 15:40
Client ID: AR1242302
Sample Info: AR1242302,AR1242302,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0123R.D
 Lab Smp Id: AR12423C2 Client Smp ID: AR12423C2
 Inj Date : 07-MAY-2015 15:40
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12423C2,AR12423C2,,ar1242.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
 Als bottle: 6 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO		
=====	=====	=====	=====	=====	=====	=====		
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8				
3.625	3.623	0.002	11394 0.02000	0.021				(a)

4 Aroclor-1242				CAS #: 53469-21-9				
5.877	5.875	0.002	5872 0.40000	0.41	80.00-	120.00	100.00	(a)
6.076	6.073	0.003	3454 0.40000	0.41	37.27-	77.27	58.82	
6.406	6.405	0.001	3906 0.40000	0.41	43.14-	83.14	66.52	
Average of Peak Amounts =				0.41000				

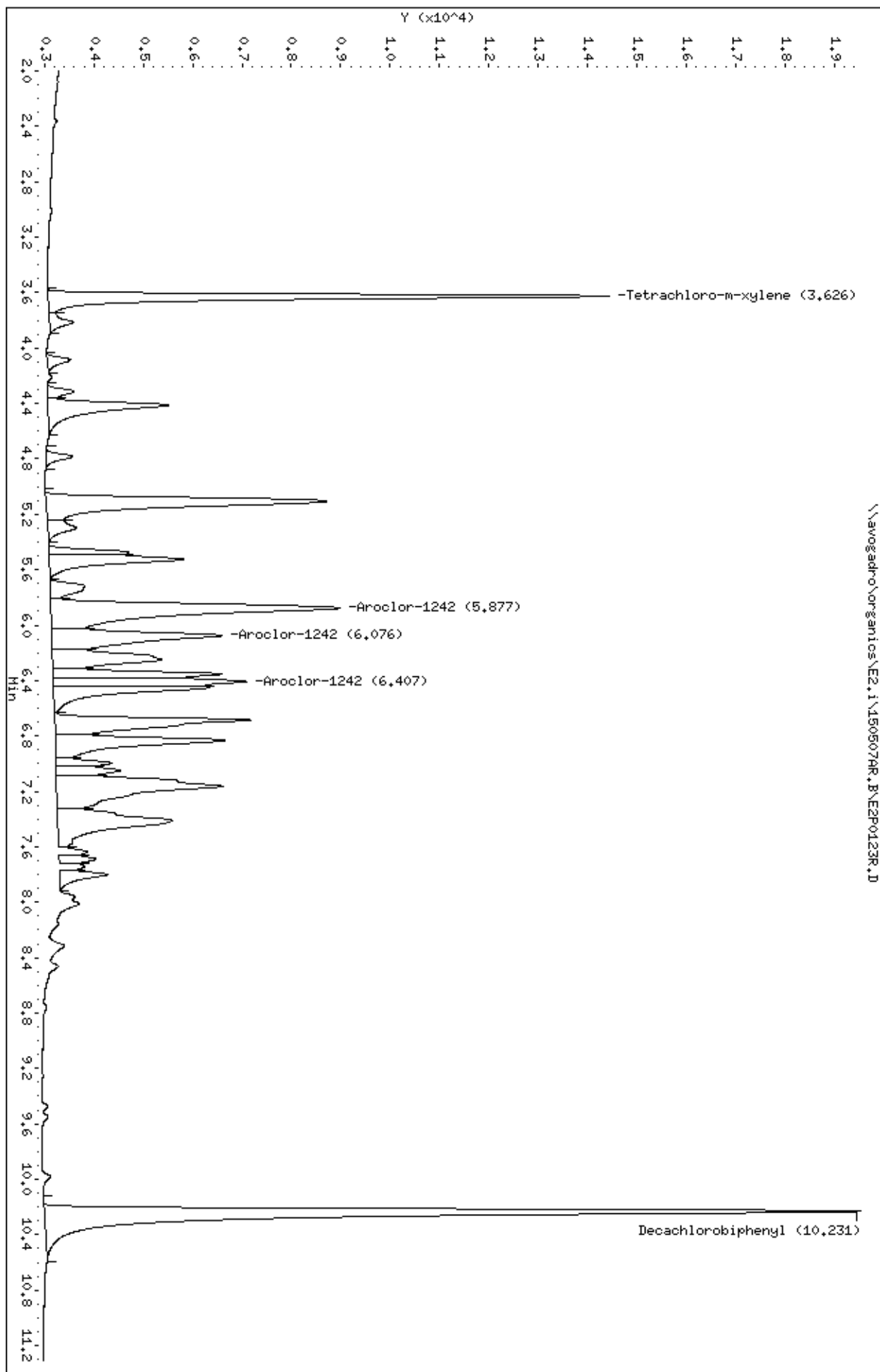
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3				
10.231	10.227	0.004	16557 0.04000	0.039				(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0123R.D
Date : 07-MAY-2015 15:40
Client ID: AR1242302
Sample Info: AR1242302,AR1242302,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0124F.D
Lab Smp Id: AR12424C2 Client Smp ID: AR12424C2
Inj Date : 07-MAY-2015 15:55
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12424C2,AR12424C2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144F.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.938	2.936	0.002	29831 0.04000	0.039		(a)

6	Aroclor-1242		CAS #: 53469-21-9			
4.842	4.841	0.001	6386 0.80000	0.82	80.00- 120.00	100.00(a)
5.555	5.554	0.001	6049 0.80000	0.84	66.91- 106.91	94.72
6.080	6.078	0.002	7742 0.80000	0.89	105.37- 145.37	121.23
Average of Peak Amounts =			0.85000			

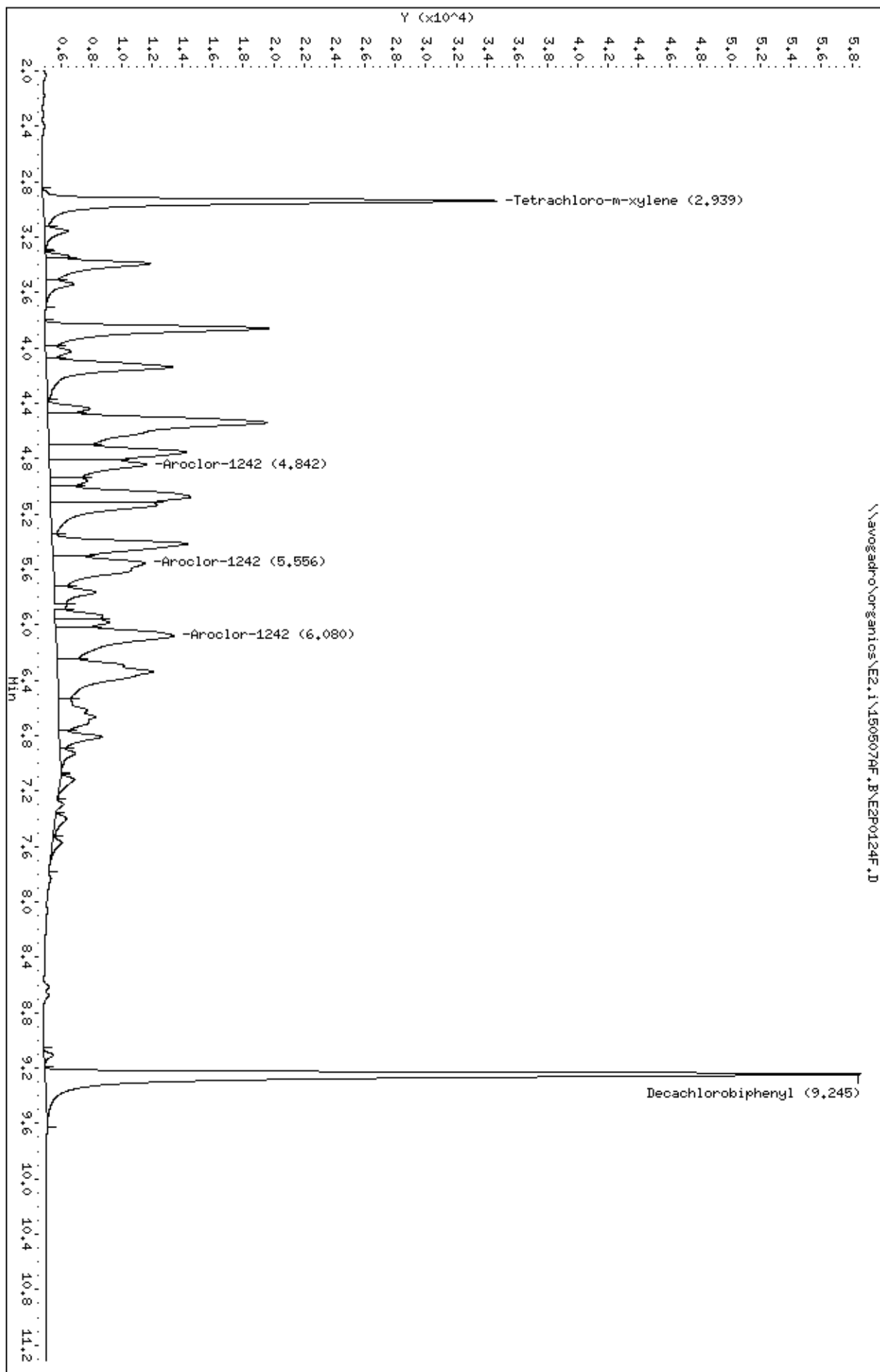
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.244	9.241	0.003	1644009 0.08000	0.075		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0124F.D
 Date : 07-MAY-2015 15:55
 Client ID: AR12424C2
 Sample Info: AR12424C2,AR12424C2,,ar1242,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0124R.D
Lab Smp Id: AR12424C2 Client Smp ID: AR12424C2
Inj Date : 07-MAY-2015 15:55
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12424C2,AR12424C2,,ar1242.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144R.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	22643 0.04000	0.041		(a)

4	Aroclor-1242		CAS #: 53469-21-9			
5.876	5.875	0.001	12196 0.80000	0.85	80.00- 120.00	100.00(a)
6.075	6.073	0.002	7090 0.80000	0.84	37.27- 77.27	58.13
6.406	6.405	0.001	7761 0.80000	0.80	43.14- 83.14	63.64
Average of Peak Amounts =			0.83000			

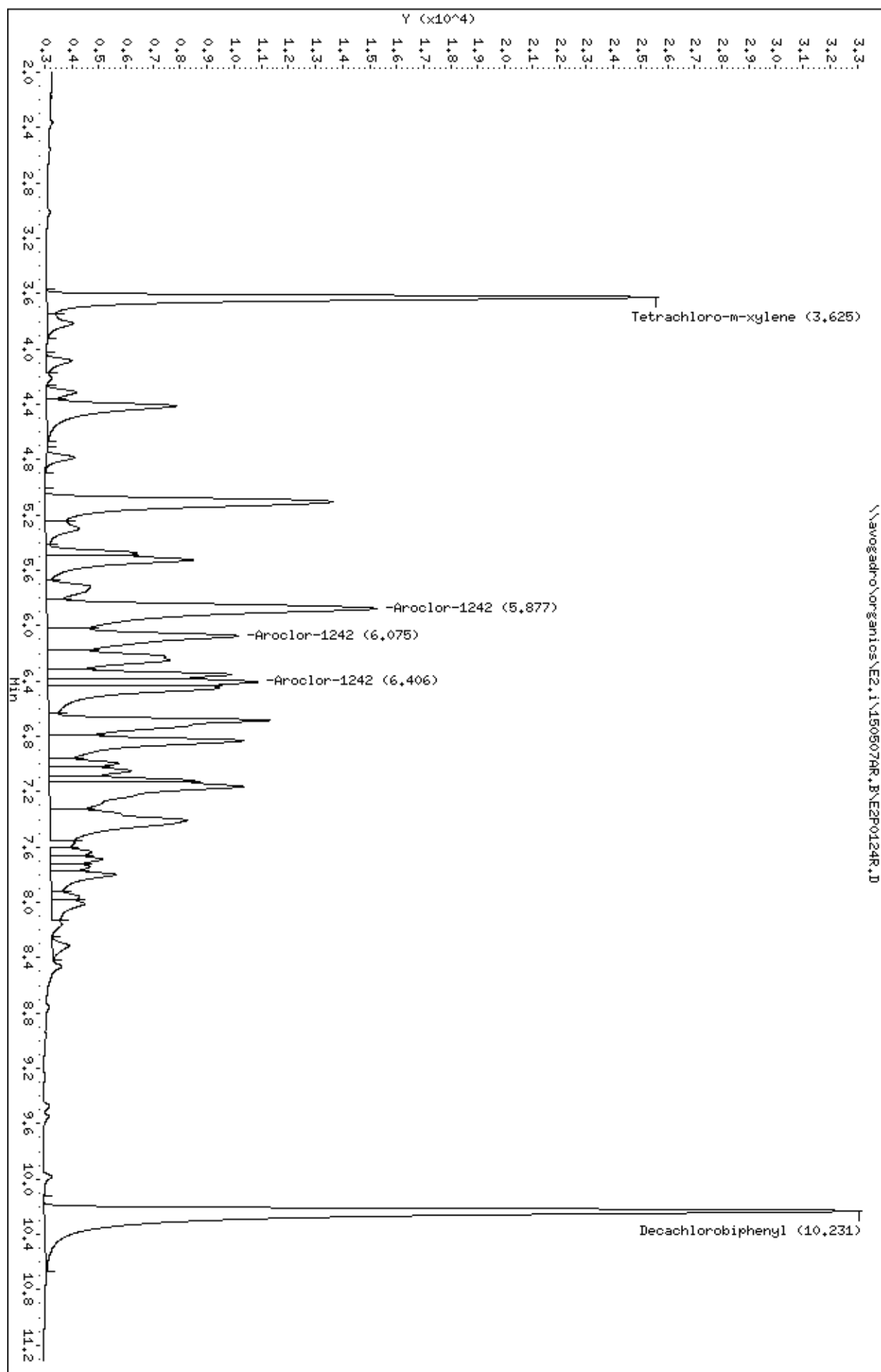
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.230	10.227	0.003	30172 0.08000	0.073		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0124R.D
Date : 07-MAY-2015 15:55
Client ID: AR12424C2
Sample Info: AR12424C2,AR12424C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0125F.D
 Lab Smp Id: AR12425C2 Client Smp ID: AR12425C2
 Inj Date : 07-MAY-2015 16:09
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12425C2,AR12425C2,,ar1242.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 8 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

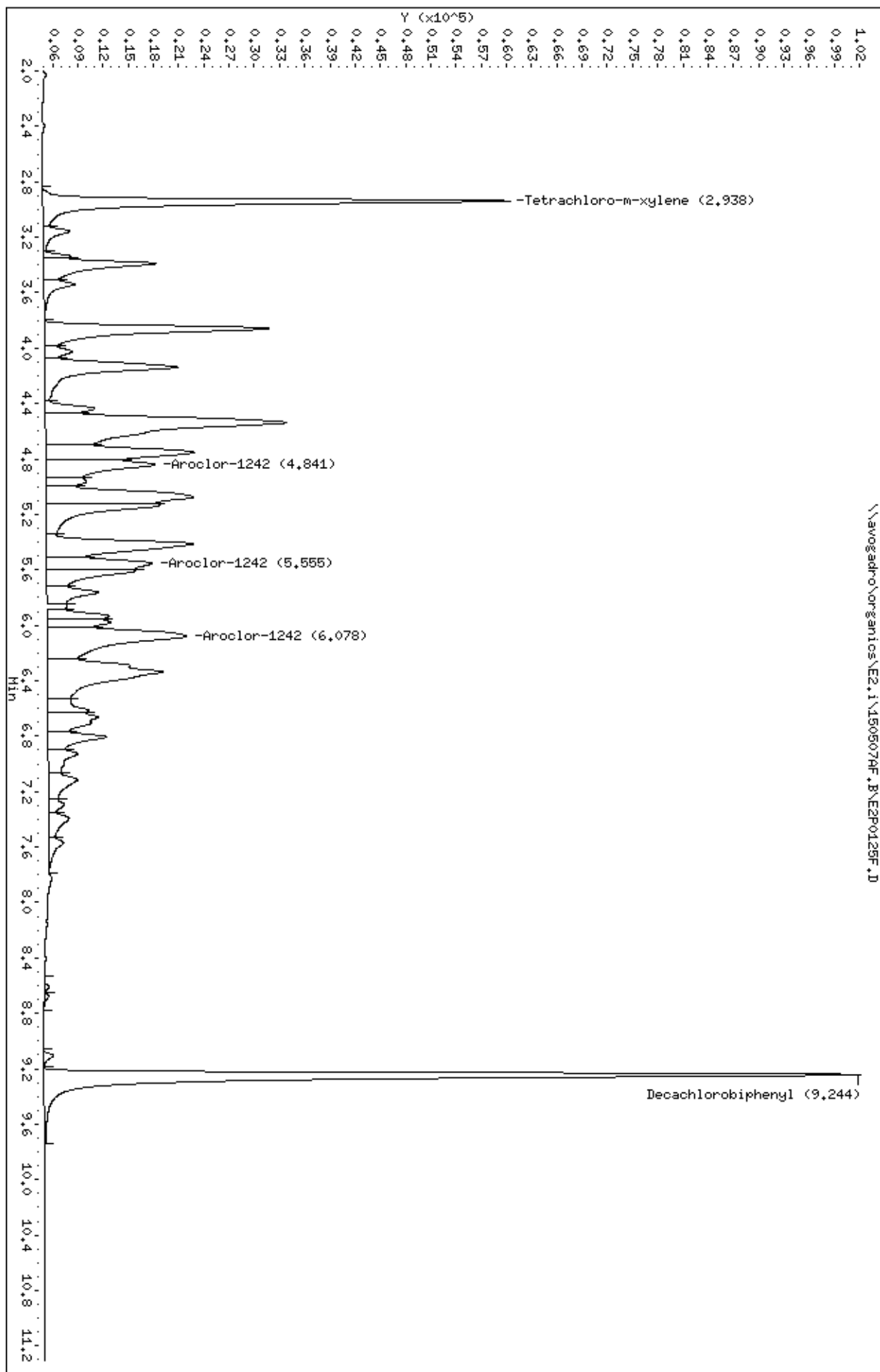
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.938	2.936	0.002	55658 0.08000	0.073		

6	Aroclor-1242		CAS #: 53469-21-9			
4.841	4.841	0.000	12976 1.60000	1.7	80.00- 120.00	100.00
5.554	5.554	0.000	12503 1.60000	1.7	66.91- 106.91	96.35
6.078	6.078	0.000	16584 1.60000	1.9	105.37- 145.37	127.81
Average of Peak Amounts =			1.76667			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.243	9.241	0.002	3030892 0.16000	0.14		

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0125F.D
Date : 07-MAY-2015 16:09
Client ID: AR12425C2
Sample Info: AR12425C2,AR12425C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0125R.D
 Lab Smp Id: AR12425C2 Client Smp ID: AR12425C2
 Inj Date : 07-MAY-2015 16:09
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12425C2,AR12425C2,,ar1242.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 8 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

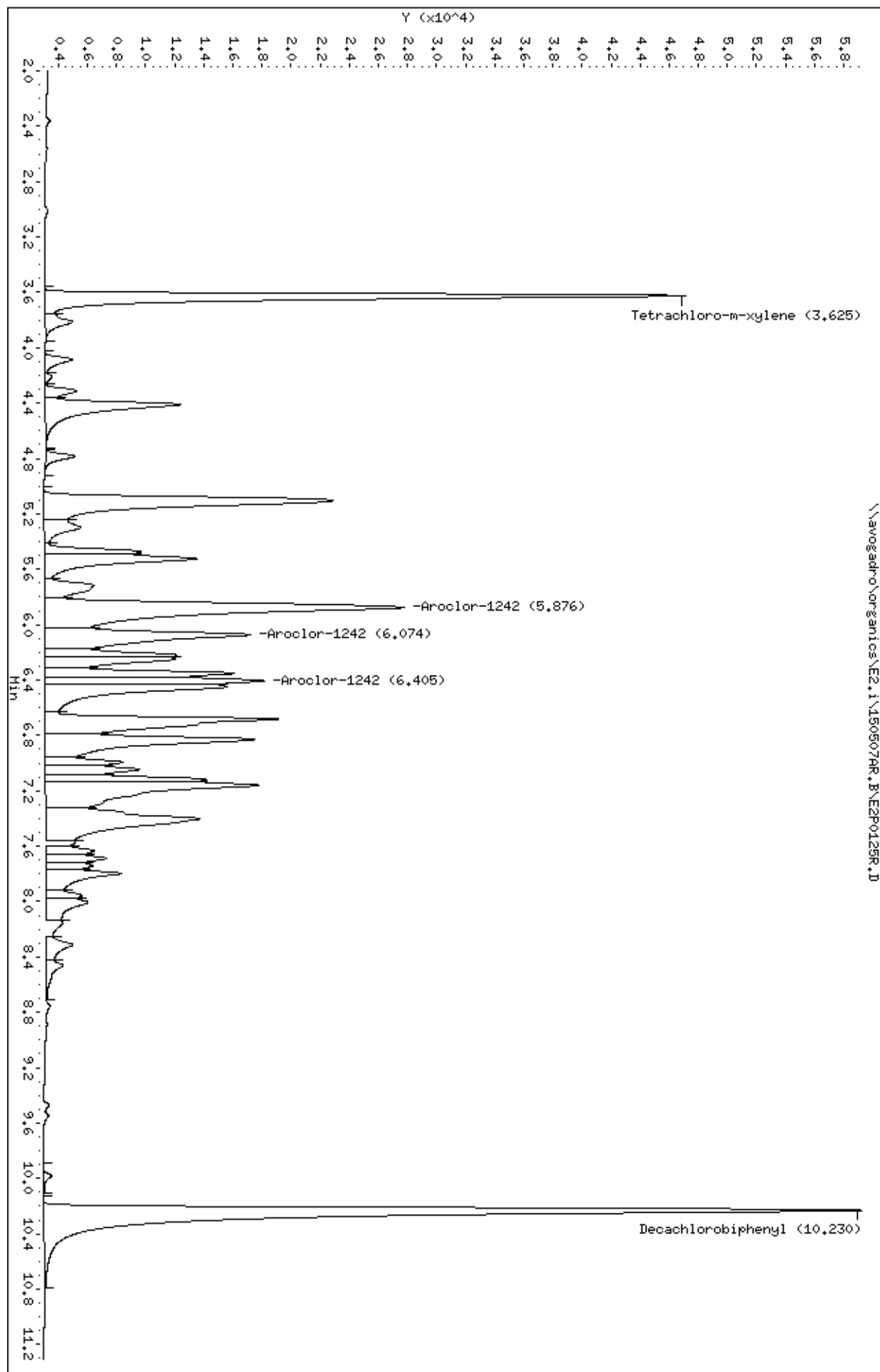
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.624	3.623	0.001	44145 0.08000	0.081		

4 Aroclor-1242 CAS #: 53469-21-9						
5.875	5.875	0.000	24737 1.60000	1.7	80.00- 120.00	100.00
6.073	6.073	0.000	14192 1.60000	1.7	37.27- 77.27	57.37
6.405	6.405	0.000	15069 1.60000	1.6	43.14- 83.14	60.92
Average of Peak Amounts =			1.66667			

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.229	10.227	0.002	56167 0.16000	0.14		

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0125R.D
Date : 07-MAY-2015 16:09
Client ID: AR12425C2
Sample Info: AR12425C2,AR12425C2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0126F.D
 Lab Smp Id: AR12481C2 Client Smp ID: AR12481C2
 Inj Date : 07-MAY-2015 16:24
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12481C2,AR12481C2,,ar1248.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140F.D
 Als bottle: 9 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.939	2.936	0.003	4019 0.00500	0.0053		(a)

7 Aroclor-1248 CAS #: 12672-29-6						
6.075	6.070	0.005	1473 0.10000	0.091	80.00- 120.00	100.00(a)
6.341	6.334	0.007	1551 0.10000	0.098	69.73- 109.73	105.30
6.809	6.802	0.007	978 0.10000	0.096	34.63- 74.63	66.40
Average of Peak Amounts =			0.09500			

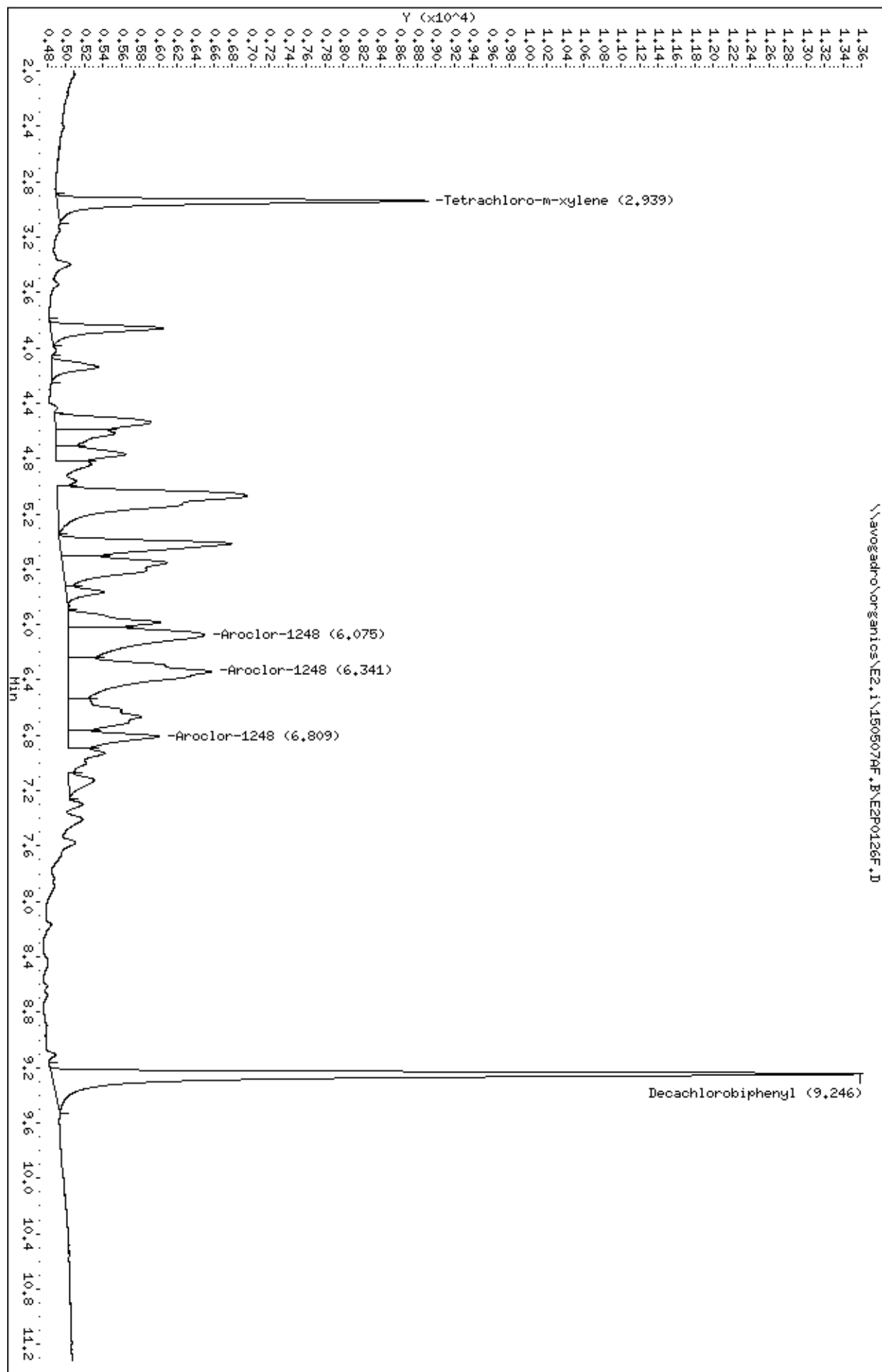
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.246	9.241	0.005	265771 0.01000	0.012		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0126F.D
 Date : 07-MAY-2015 16:24
 Client ID: AR12481C2
 Sample Info: AR12481C2,AR12481C2,,ar1248,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0126R.D
 Lab Smp Id: AR12481C2 Client Smp ID: AR12481C2
 Inj Date : 07-MAY-2015 16:24
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12481C2,AR12481C2,,ar1248.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140R.D
 Als bottle: 9 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.626	3.623	0.003	2637 0.00500	0.0048	(a)	

5	Aroclor-1248		CAS #: 12672-29-6			
7.052	7.044	0.008	500 0.10000	0.089 80.00- 120.00	100.00(a)	
7.160	7.156	0.004	1740 0.10000	0.099 305.09- 345.09	348.00	
7.802	7.794	0.008	829 0.10000	0.097 133.79- 173.79	165.80	
Average of Peak Amounts =			0.09500			

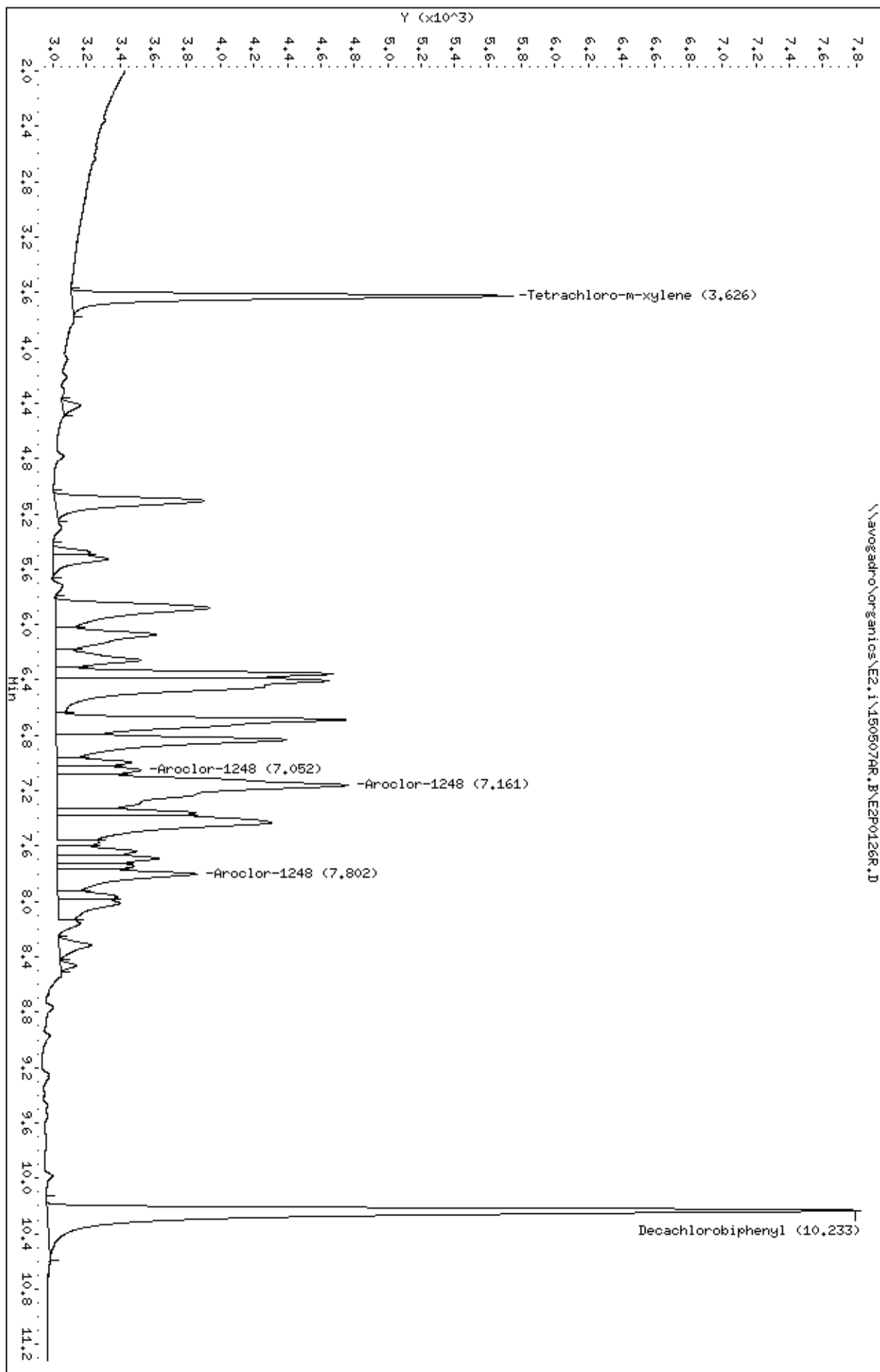
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.233	10.227	0.006	4860 0.01000	0.012	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0126R.D
Date : 07-MAY-2015 16:24
Client ID: AR12481C2
Sample Info: AR12481C2,AR12481C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0127F.D
 Lab Smp Id: AR12486C2 Client Smp ID: AR12486C2
 Inj Date : 07-MAY-2015 16:38
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12486C2,AR12486C2,,ar1248.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141F.D
 Als bottle: 10 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.939	2.936	0.003	1995	0.00000	0.0026		(a)	

7 Aroclor-1248					CAS #: 12672-29-6			
6.076	6.070	0.006	710	0.05000	0.045	80.00- 120.00	100.00(a)	
6.340	6.334	0.006	768	0.05000	0.049	69.73- 109.73	108.17	
6.809	6.802	0.007	474	0.05000	0.047	34.63- 74.63	66.76	
Average of Peak Amounts =					0.04700			

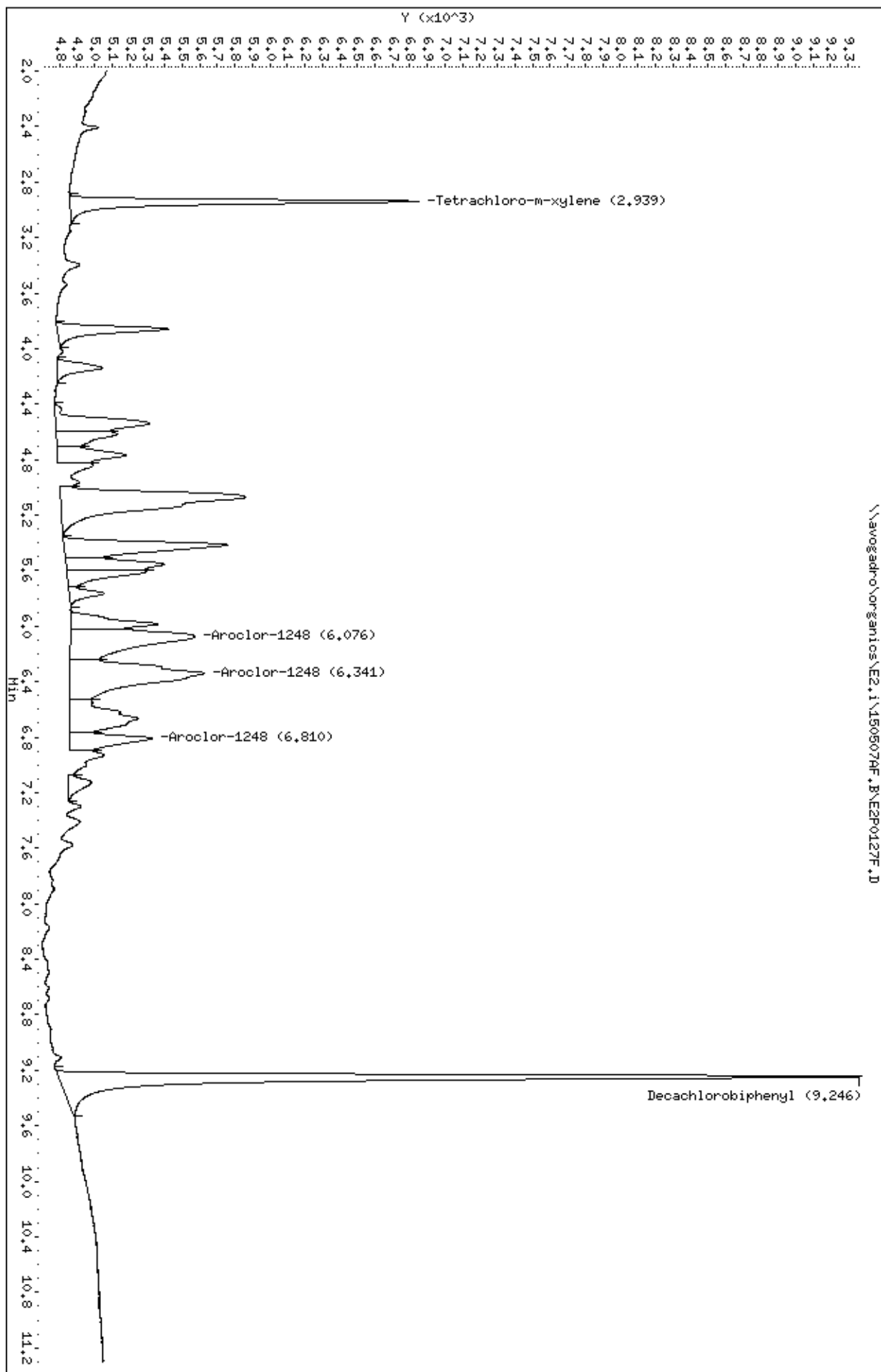
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.245	9.241	0.004	141460	0.00000	0.0063		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0127F.D
 Date : 07-MAY-2015 16:38
 Client ID: AR12486C2
 Sample Info: AR12486C2,AR12486C2,,ar1248,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0127R.D
 Lab Smp Id: AR12486C2 Client Smp ID: AR12486C2
 Inj Date : 07-MAY-2015 16:38
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12486C2,AR12486C2,,ar1248.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141R.D
 Als bottle: 10 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.627	3.623	0.004	1265	0.00000	0.0023			(a)

5 Aroclor-1248					CAS #: 12672-29-6			
7.053	7.044	0.009	244	0.05000	0.045	80.00-	120.00	100.00(a)
7.161	7.156	0.005	879	0.05000	0.050	305.09-	345.09	360.25
7.804	7.794	0.010	409	0.05000	0.048	133.79-	173.79	167.62
Average of Peak Amounts =					0.04767			

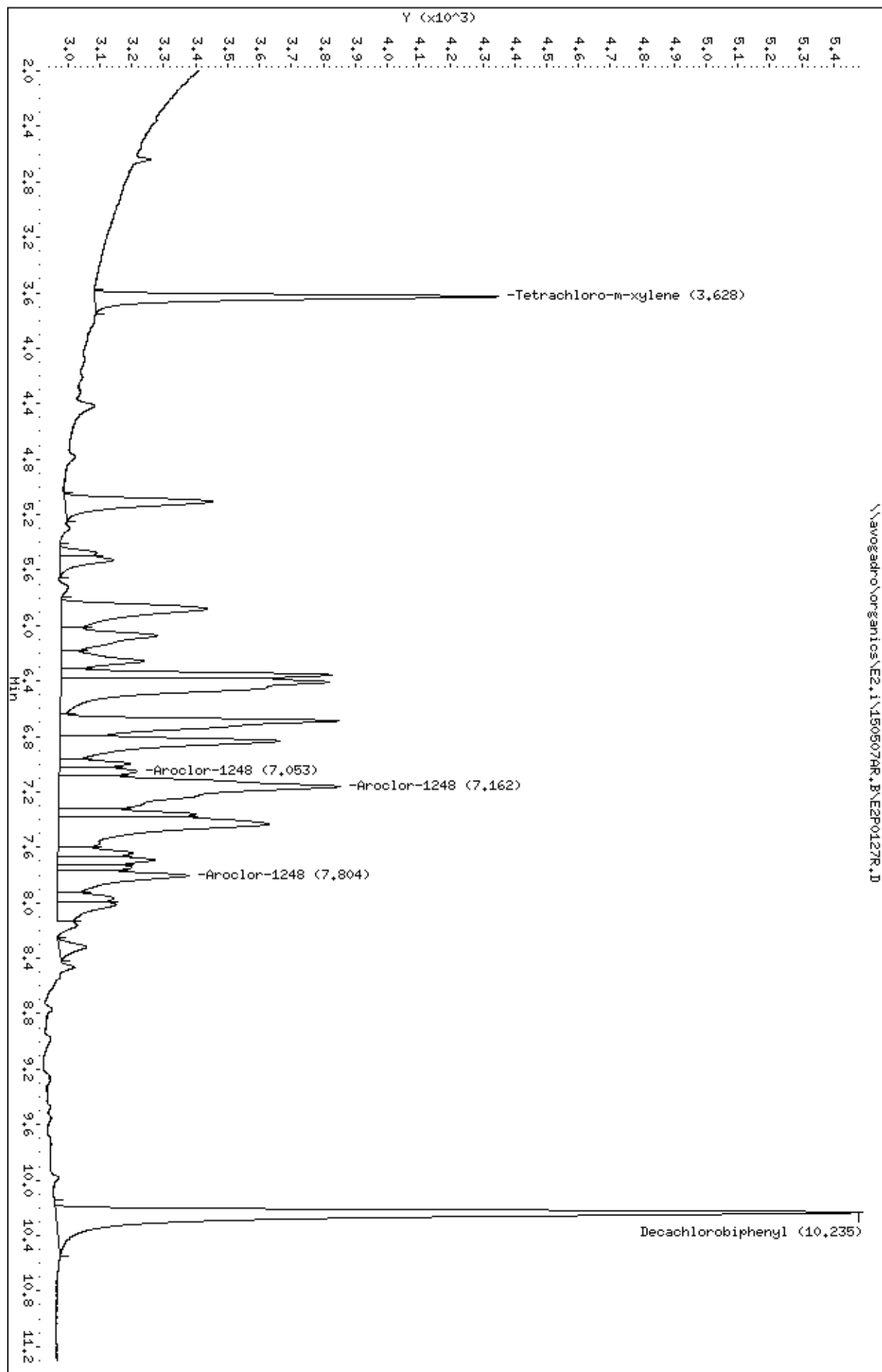
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.234	10.227	0.007	2531	0.00000	0.0062			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0127R.D
Date : 07-MAY-2015 16:38
Client ID: AR12486C2
Sample Info: AR12486C2,AR12486C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0128F.D
 Lab Smp Id: AR12482C2 Client Smp ID: AR12482C2
 Inj Date : 07-MAY-2015 16:53
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12482C2,AR12482C2,,ar1248.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142F.D
 Als bottle: 11 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS									
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
2.939	2.936	0.003	7874	0.01000	0.010				(a)

7 Aroclor-1248					CAS #: 12672-29-6				
6.074	6.070	0.004	3162	0.20000	0.20	80.00-	120.00	100.00	(a)
6.339	6.334	0.005	3185	0.20000	0.20	69.73-	109.73	100.73	
6.807	6.802	0.005	1992	0.20000	0.19	34.63-	74.63	63.00	
Average of Peak Amounts =					0.19667				

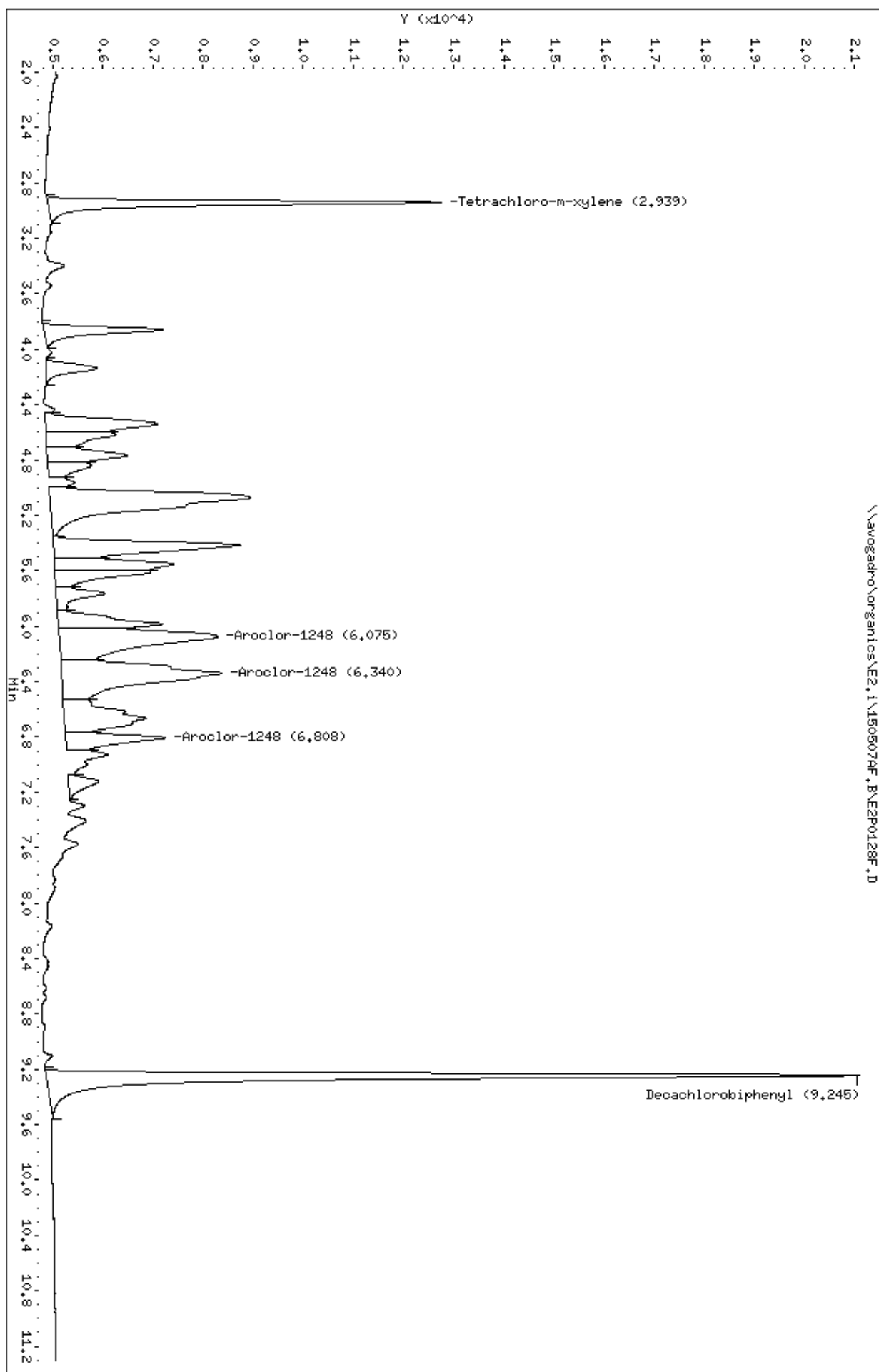
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3				
9.245	9.241	0.004	506525	0.02000	0.022				(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AF.B\EP0128F.D
Date : 07-MAY-2015 16:53
Client ID: AR12482C2
Sample Info: AR12482C2,AR12482C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0128R.D
 Lab Smp Id: AR12482C2 Client Smp ID: AR12482C2
 Inj Date : 07-MAY-2015 16:53
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12482C2,AR12482C2,,ar1248.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142R.D
 Als bottle: 11 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	5482 0.01000	0.0099		(a)

5	Aroclor-1248		CAS #: 12672-29-6			
7.050	7.044	0.006	1064 0.20000	0.20	80.00- 120.00	100.00(a)
7.159	7.156	0.003	3506 0.20000	0.20	305.09- 345.09	329.51
7.800	7.794	0.006	1683 0.20000	0.20	133.79- 173.79	158.18
Average of Peak Amounts =			0.20000			

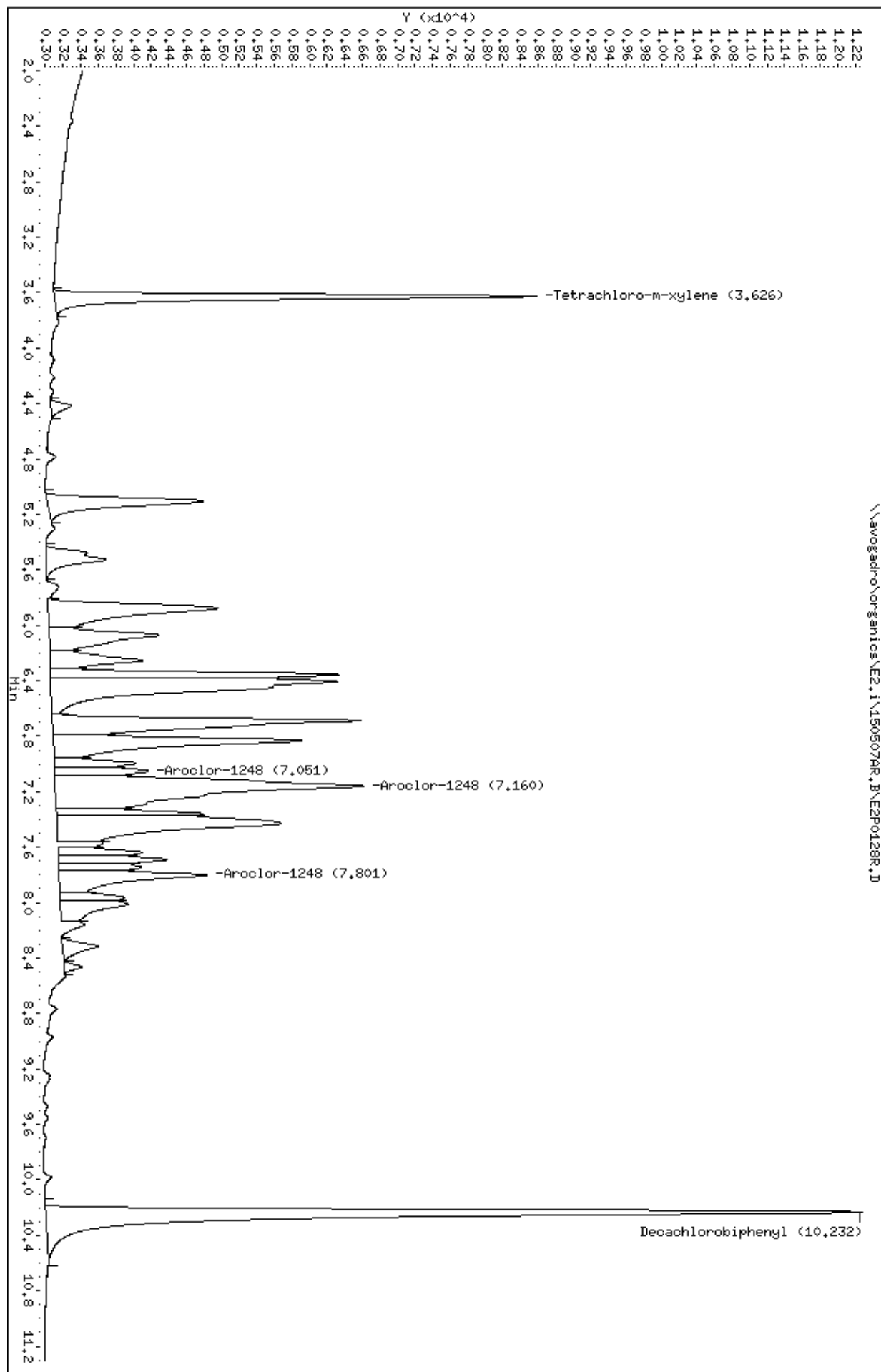
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.232	10.227	0.005	9296 0.02000	0.022		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0128R.D
 Date : 07-MAY-2015 16:53
 Client ID: AR12482C2
 Sample Info: AR12482C2,AR12482C2,,ar1248,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0129F.D
 Lab Smp Id: AR12483C2 Client Smp ID: AR12483C2
 Inj Date : 07-MAY-2015 17:07
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483C2,AR12483C2,,ar1248.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 12 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.938	2.936	0.002	16041	0.02000	0.021		(a)	

7 Aroclor-1248					CAS #: 12672-29-6			
6.075	6.070	0.005	7024	0.40000	0.43	80.00- 120.00	100.00(a)	
6.338	6.334	0.004	6871	0.40000	0.43	69.73- 109.73	97.82	
6.807	6.802	0.005	4669	0.40000	0.44	34.63- 74.63	66.47	
Average of Peak Amounts =					0.43333			

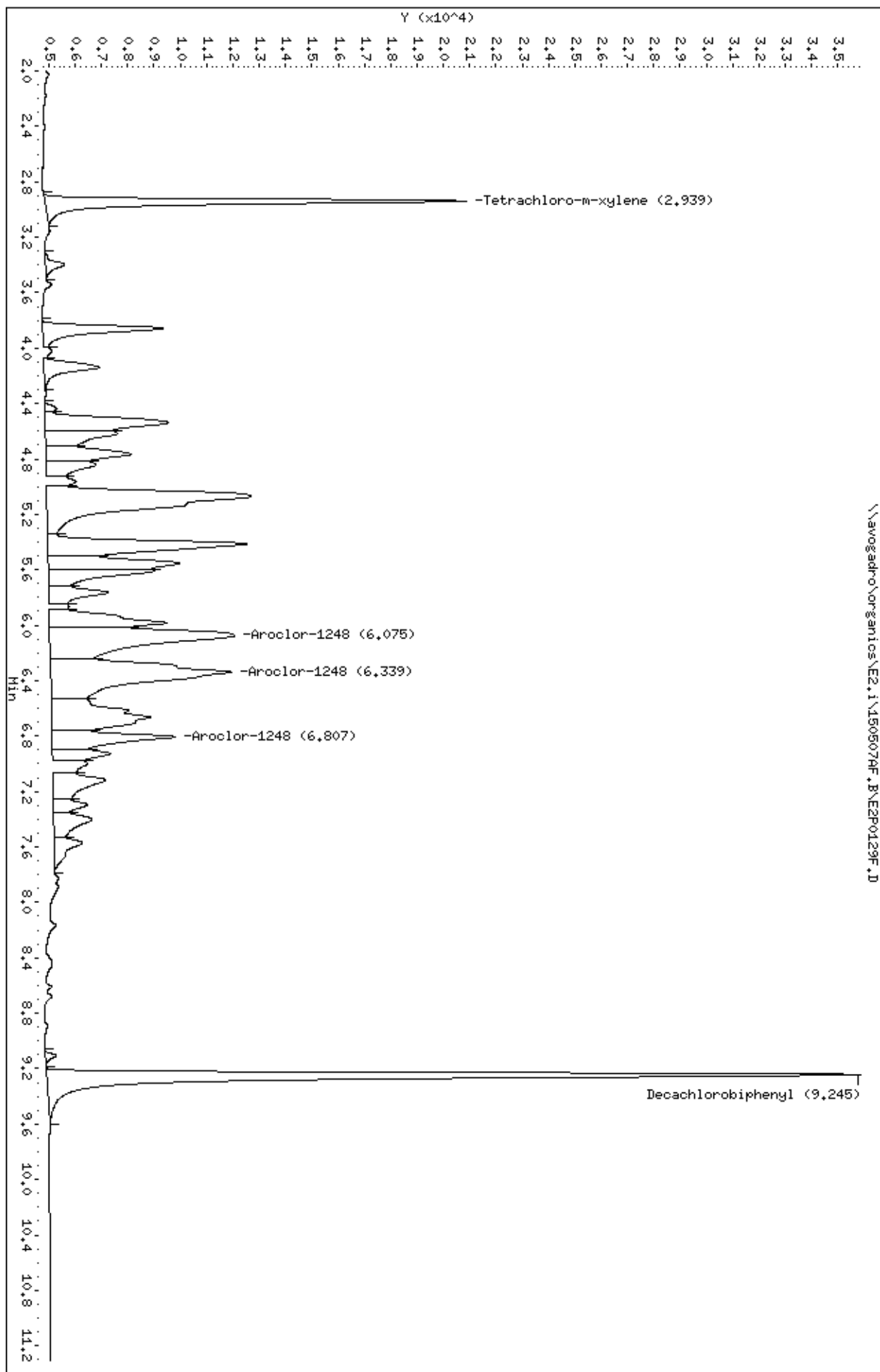
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.244	9.241	0.003	958875	0.04000	0.042		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AF.B\EP0129F.D
Date : 07-MAY-2015 17:07
Client ID: AR1248302
Sample Info: AR1248302,AR1248302,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0129R.D
 Lab Smp Id: AR12483C2 Client Smp ID: AR12483C2
 Inj Date : 07-MAY-2015 17:07
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483C2,AR12483C2,,ar1248.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
 Als bottle: 12 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	11793 0.02000	0.021		(a)

5	Aroclor-1248		CAS #: 12672-29-6			
7.049	7.044	0.005	2260 0.40000	0.42	80.00- 120.00	100.00(a)
7.159	7.156	0.003	7132 0.40000	0.40	305.09- 345.09	315.58
7.798	7.794	0.004	3464 0.40000	0.41	133.79- 173.79	153.27
Average of Peak Amounts =			0.41000			

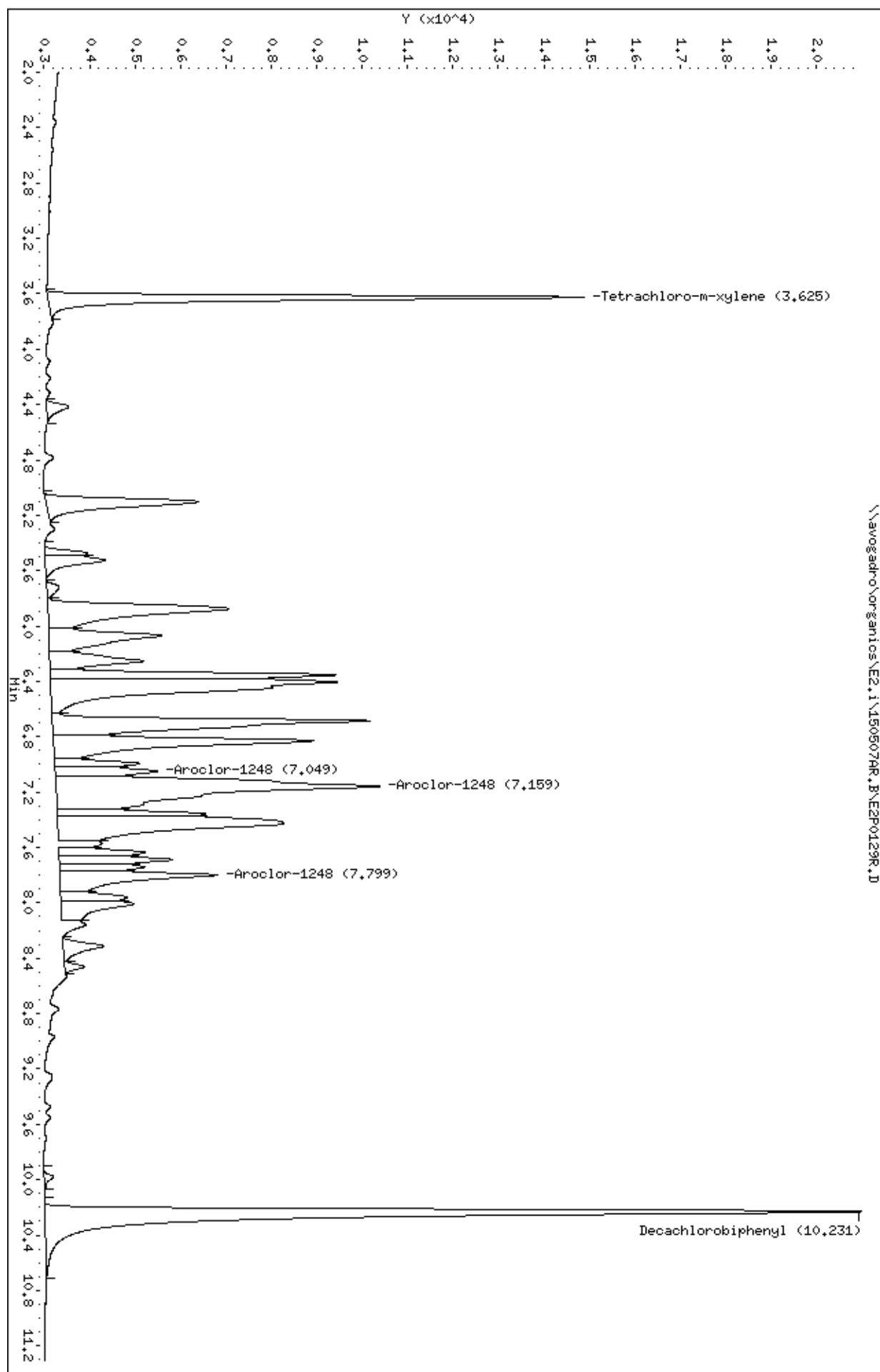
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.230	10.227	0.003	17967 0.04000	0.042		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0129R.D
Date : 07-MAY-2015 17:07
Client ID: AR1248302
Sample Info: AR1248302,AR1248302,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0130F.D
Lab Smp Id: AR12484C2 Client Smp ID: AR12484C2
Inj Date : 07-MAY-2015 17:22
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12484C2,AR12484C2,,ar1248.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144F.D
Als bottle: 13 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	29342 0.04000	0.038		(a)

7	Aroclor-1248		CAS #: 12672-29-6			
6.073	6.070	0.003	13867 0.80000	0.86	80.00- 120.00	100.00(a)
6.337	6.334	0.003	13127 0.80000	0.82	69.73- 109.73	94.66
6.805	6.802	0.003	8974 0.80000	0.85	34.63- 74.63	64.71
Average of Peak Amounts =			0.84333			

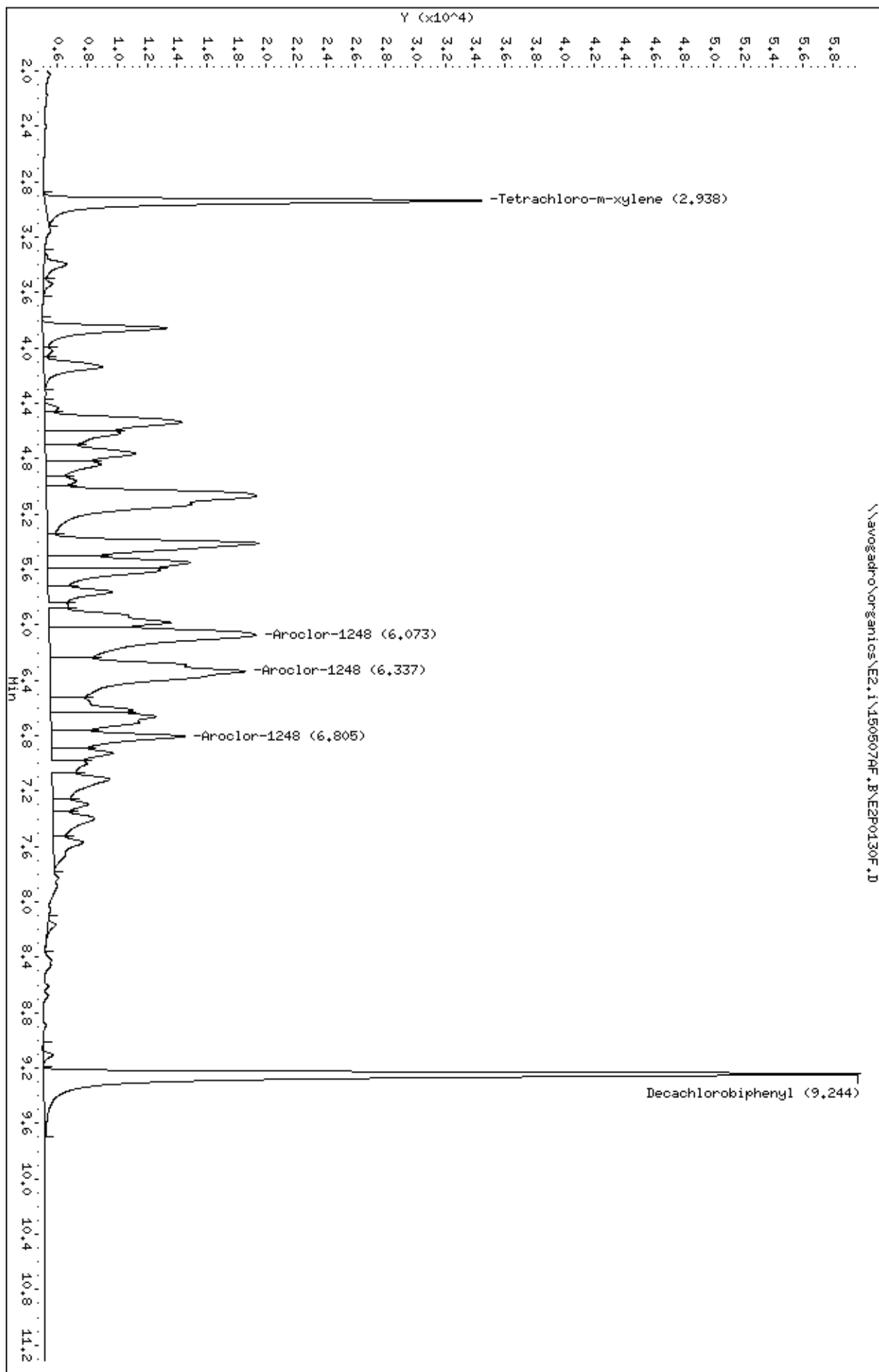
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.243	9.241	0.002	1721137 0.08000	0.074		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0130F.D
Date : 07-MAY-2015 17:22
Client ID: AR12484C2
Sample Info: AR12484C2,AR12484C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0130R.D
 Lab Smp Id: AR12484C2 Client Smp ID: AR12484C2
 Inj Date : 07-MAY-2015 17:22
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12484C2,AR12484C2,,ar1248.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144R.D
 Als bottle: 13 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.624	3.623	0.001	22896 0.04000	0.041		(a)

5	Aroclor-1248		CAS #: 12672-29-6			
7.047	7.044	0.003	5053 0.80000	0.91	80.00- 120.00	100.00(a)
7.158	7.156	0.002	14528 0.80000	0.82	305.09- 345.09	287.51
7.797	7.794	0.003	7518 0.80000	0.87	133.79- 173.79	148.78
Average of Peak Amounts =			0.86667			

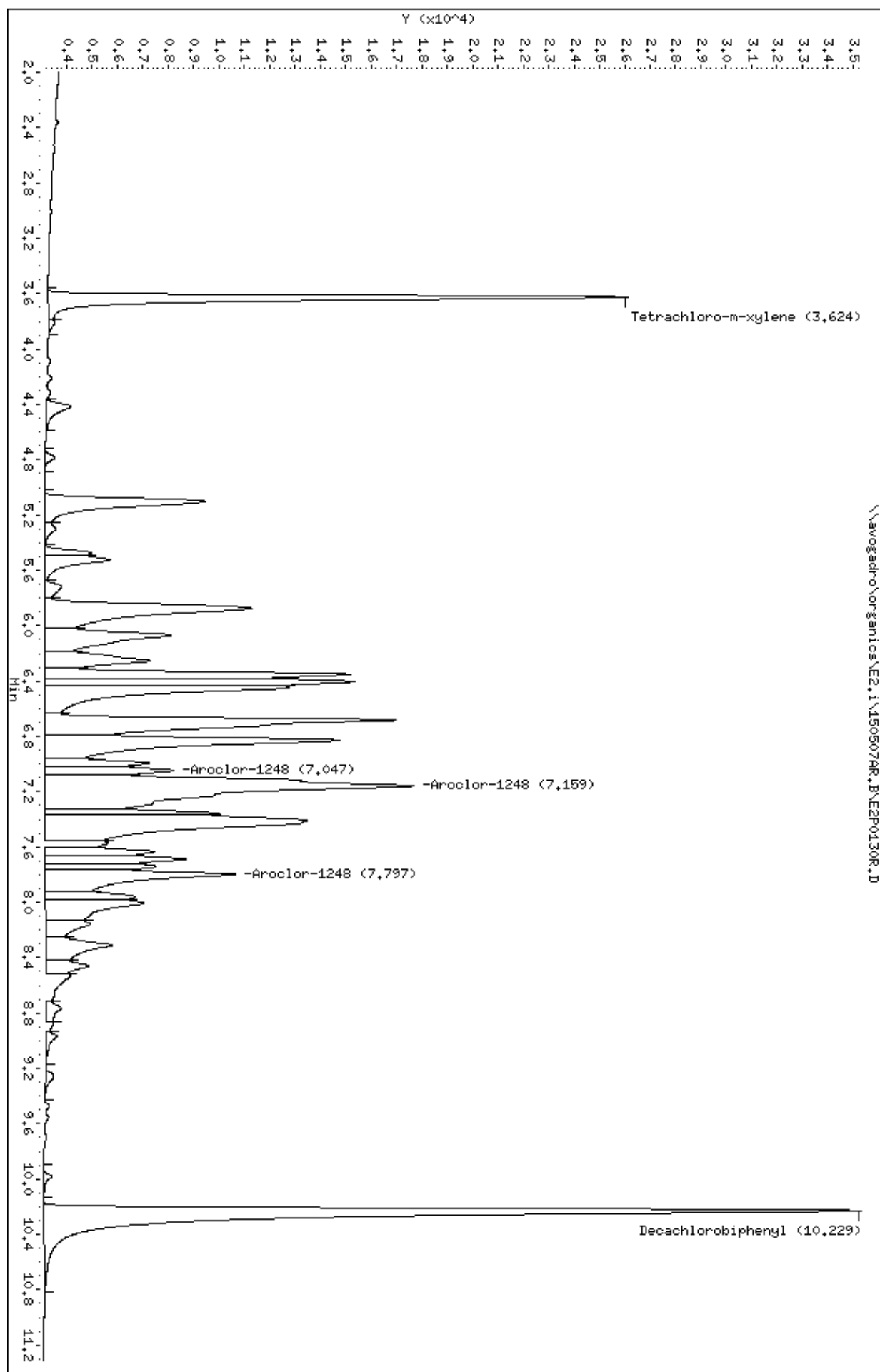
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.229	10.227	0.002	32204 0.08000	0.075		

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0130R.D
Date : 07-MAY-2015 17:22
Client ID: AR12484C2
Sample Info: AR12484C2,AR12484C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0131F.D
 Lab Smp Id: AR12485C2 Client Smp ID: AR12485C2
 Inj Date : 07-MAY-2015 17:36
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12485C2,AR12485C2,,ar1248.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 14 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

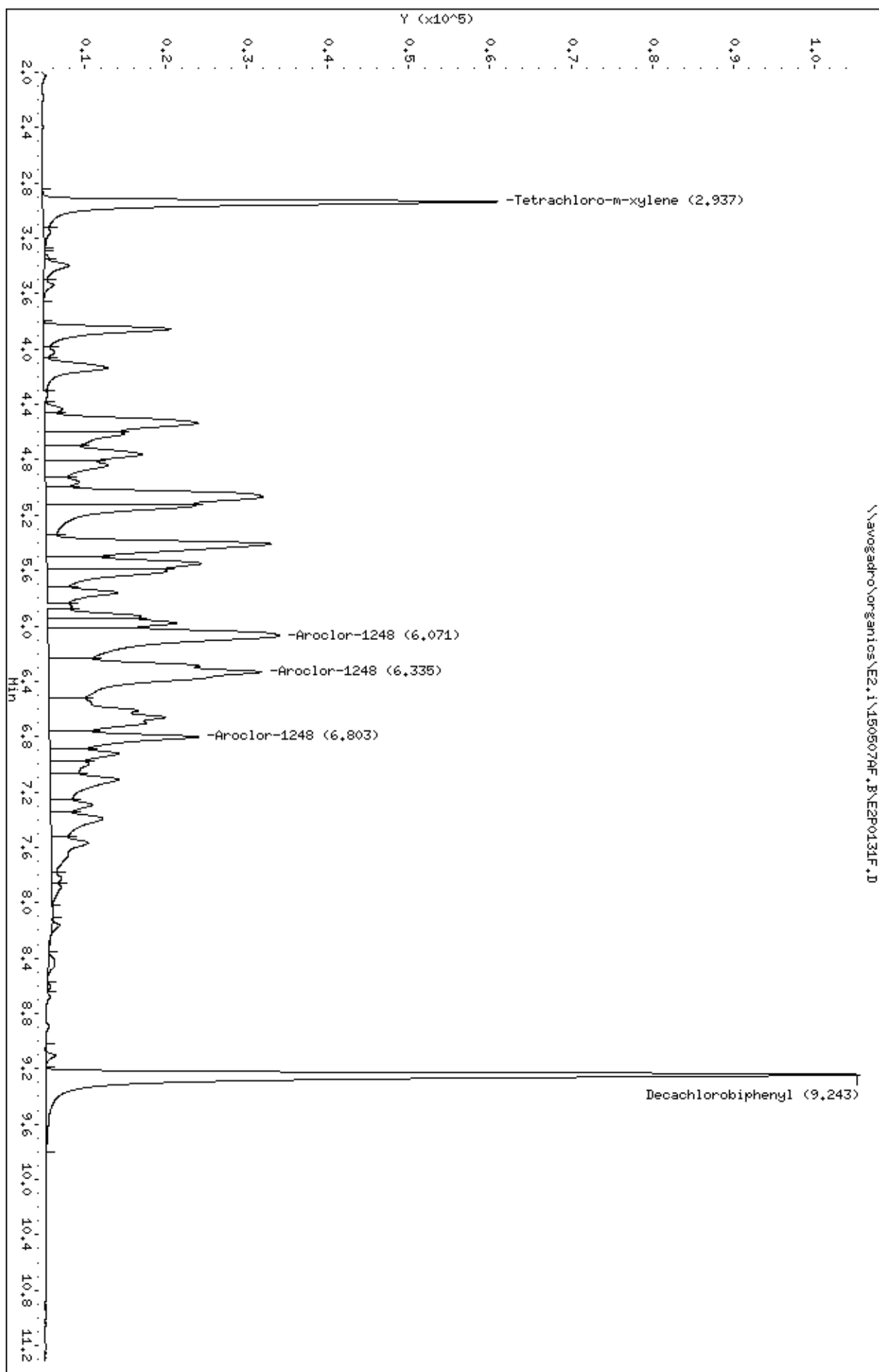
AMOUNTS						
RT	EXP RT	DLT RT	RESPONSE (	CAL -AMT (ng)	ON-COL (ng)	TARGET RANGE
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.937	2.936	0.001	56176	0.08000	0.073	

7 Aroclor-1248 CAS #: 12672-29-6						
6.070	6.070	0.000	28595	1.60000	1.8	80.00- 120.00 100.00
6.334	6.334	0.000	26282	1.60000	1.6	69.73- 109.73 91.91
6.802	6.802	0.000	18322	1.60000	1.7	34.63- 74.63 64.07
Average of Peak Amounts =			1.70000			

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.243	9.241	0.002	3191453	0.16000	0.14	

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0131F.D
Date : 07-MAY-2015 17:36
Client ID: AR12485C2
Sample Info: AR12485C2,AR12485C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0131R.D
 Lab Smp Id: AR12485C2 Client Smp ID: AR12485C2
 Inj Date : 07-MAY-2015 17:36
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12485C2,AR12485C2,,ar1248.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 14 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

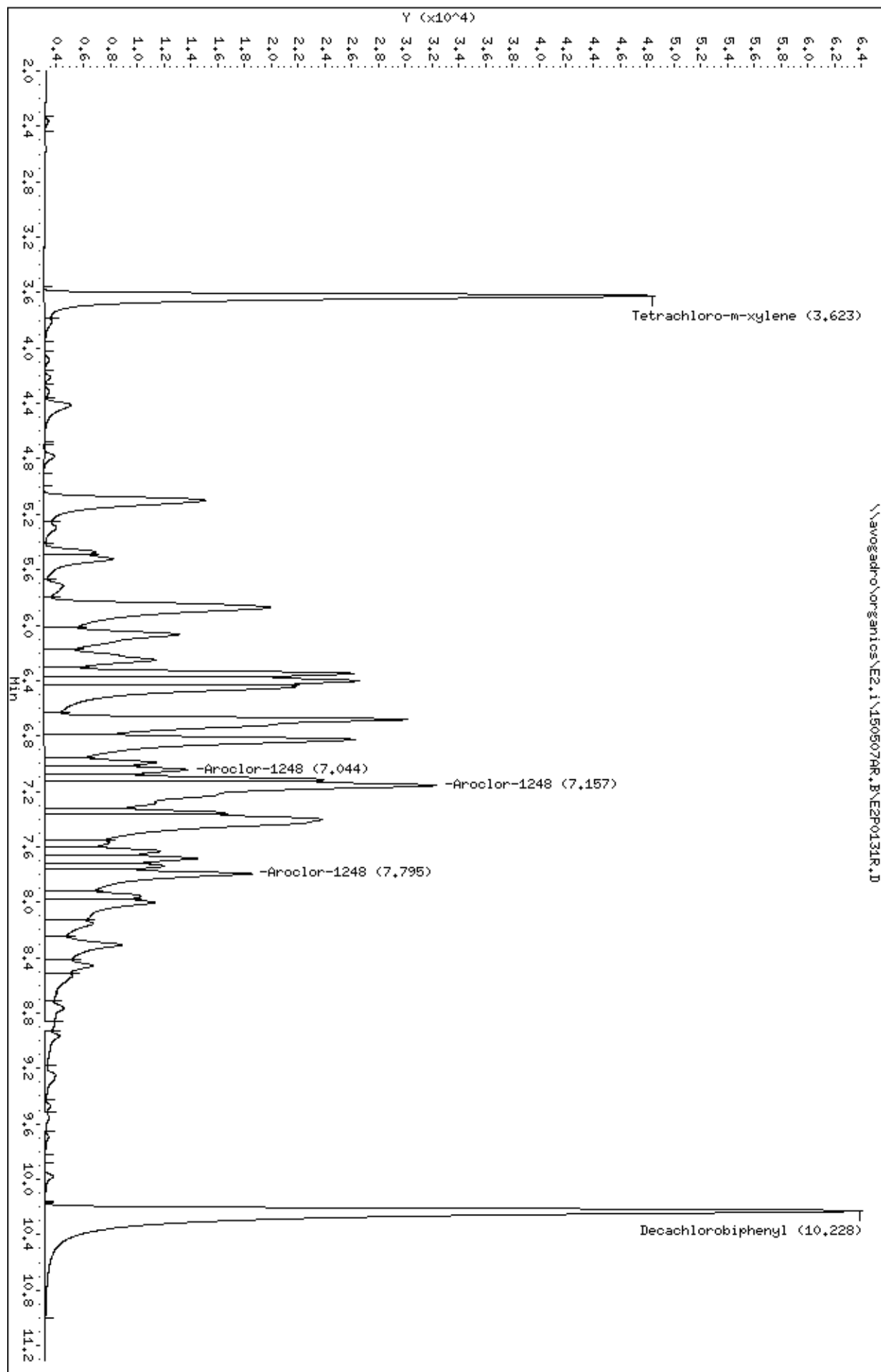
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	45542 0.08000	0.081		

5	Aroclor-1248		CAS #: 12672-29-6			
7.044	7.044	0.000	10681 1.60000	1.9 80.00- 120.00	100.00	
7.156	7.156	0.000	29246 1.60000	1.6 305.09- 345.09	273.81	
7.794	7.794	0.000	15450 1.60000	1.8 133.79- 173.79	144.65	
Average of Peak Amounts =			1.76667			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.228	10.227	0.001	60946 0.16000	0.14		

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0131R.D
Date : 07-MAY-2015 17:36
Client ID: AR12485C2
Sample Info: AR12485C2,AR12485C2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0132F.D
 Lab Smp Id: AR12541C2 Client Smp ID: AR12541C2
 Inj Date : 07-MAY-2015 17:51
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12541C2,AR12541C2,,ar1254.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140F.D
 Als bottle: 15 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====							
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
2.938	2.936	0.002	4042 0.00500	0.0053	(a)		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
9.244	9.241	0.003	266947 0.01000	0.011	(a)		

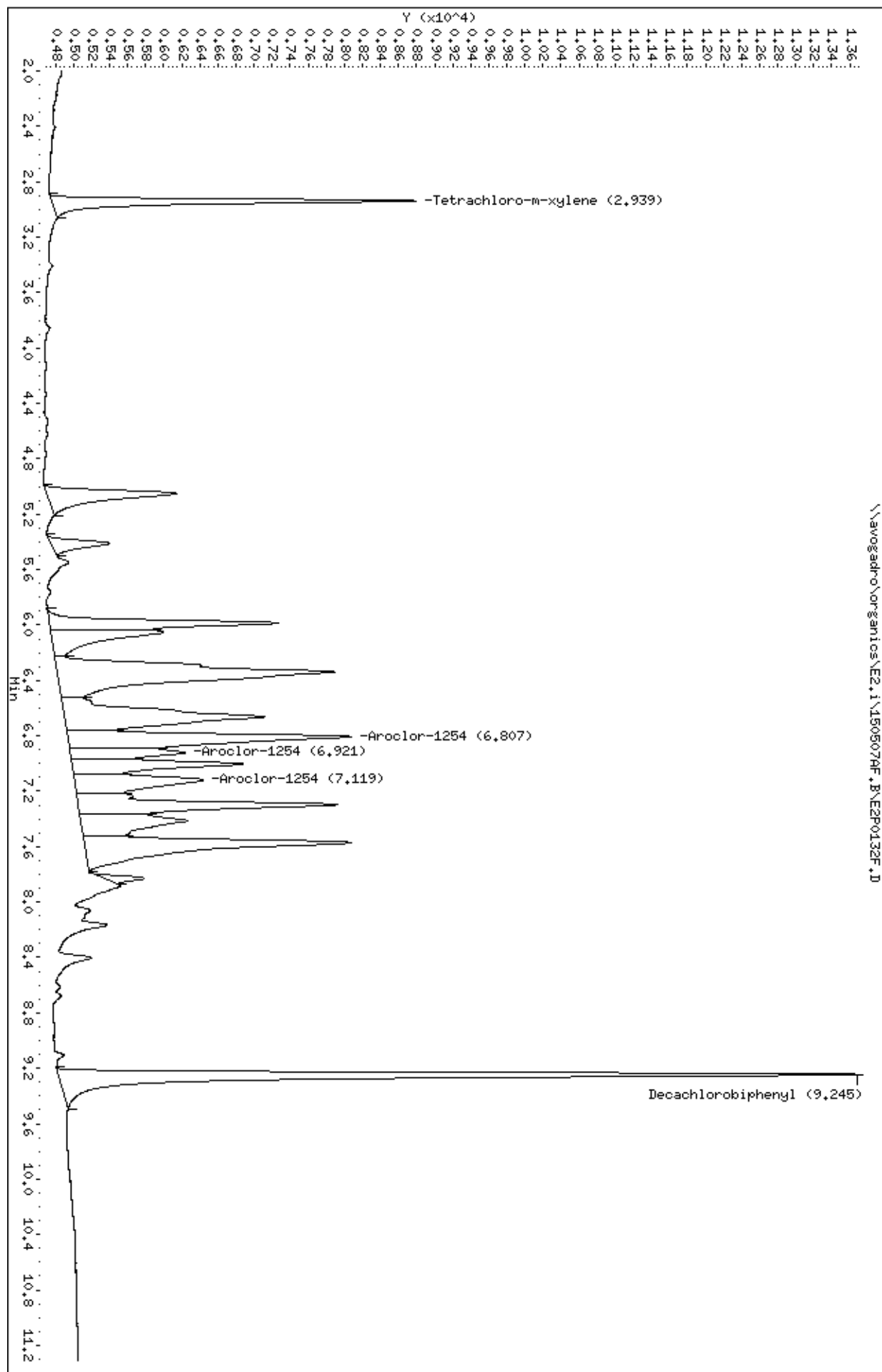
8	Aroclor-1254		CAS #: 11097-69-1				
6.807	6.799	0.008	3139 0.10000	0.097	80.00- 120.00	100.00(a)	
6.921	6.918	0.003	1274 0.10000	0.10	18.25- 58.25	40.59	
7.118	7.105	0.013	1426 0.10000	0.089	35.49- 75.49	45.43	
Average of Peak Amounts =			0.09533				

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\EP0132F.D
 Date : 07-MAY-2015 17:51
 Client ID: AR12541C2
 Sample Info: AR12541C2,AR12541C2,,ar1254,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0132R.D
 Lab Smp Id: AR12541C2 Client Smp ID: AR12541C2
 Inj Date : 07-MAY-2015 17:51
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12541C2,AR12541C2,,ar1254.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140R.D
 Als bottle: 15 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

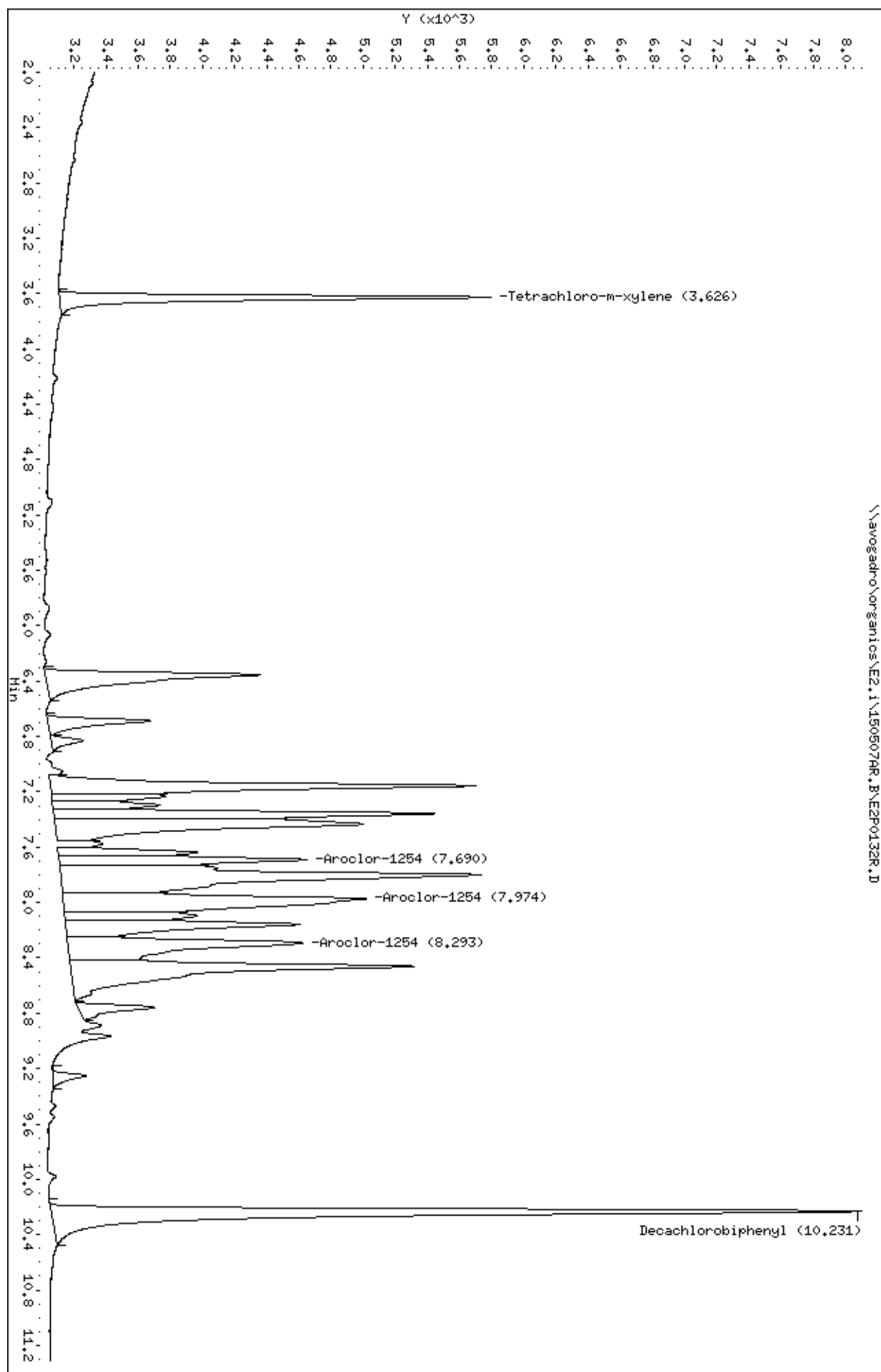
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.625	3.623	0.002	2691 0.00500	0.0048		(a)
\$ 11					CAS #: 2051-24-3	
10.231	10.227	0.004	5045 0.01000	0.011		(a)
7					CAS #: 11097-69-1	
7.690	7.684	0.006	1548 0.10000	0.096	80.00- 120.00	100.00(a)
7.974	7.968	0.006	1887 0.10000	0.10	88.83- 128.83	121.90
8.292	8.291	0.001	1459 0.10000	0.097	73.31- 113.31	94.25
Average of Peak Amounts =			0.09767			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0132R.D
Date : 07-MAY-2015 17:51
Client ID: AR12541C2
Sample Info: AR12541C2,AR12541C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0133F.D
 Lab Smp Id: AR12546C2 Client Smp ID: AR12546C2
 Inj Date : 07-MAY-2015 18:05
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12546C2,AR12546C2,,ar1254.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141F.D
 Als bottle: 16 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.938	2.936	0.002	2000 0.00000	0.0026		(a)

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.244	9.241	0.003	138208 0.00000	0.0059		(a)

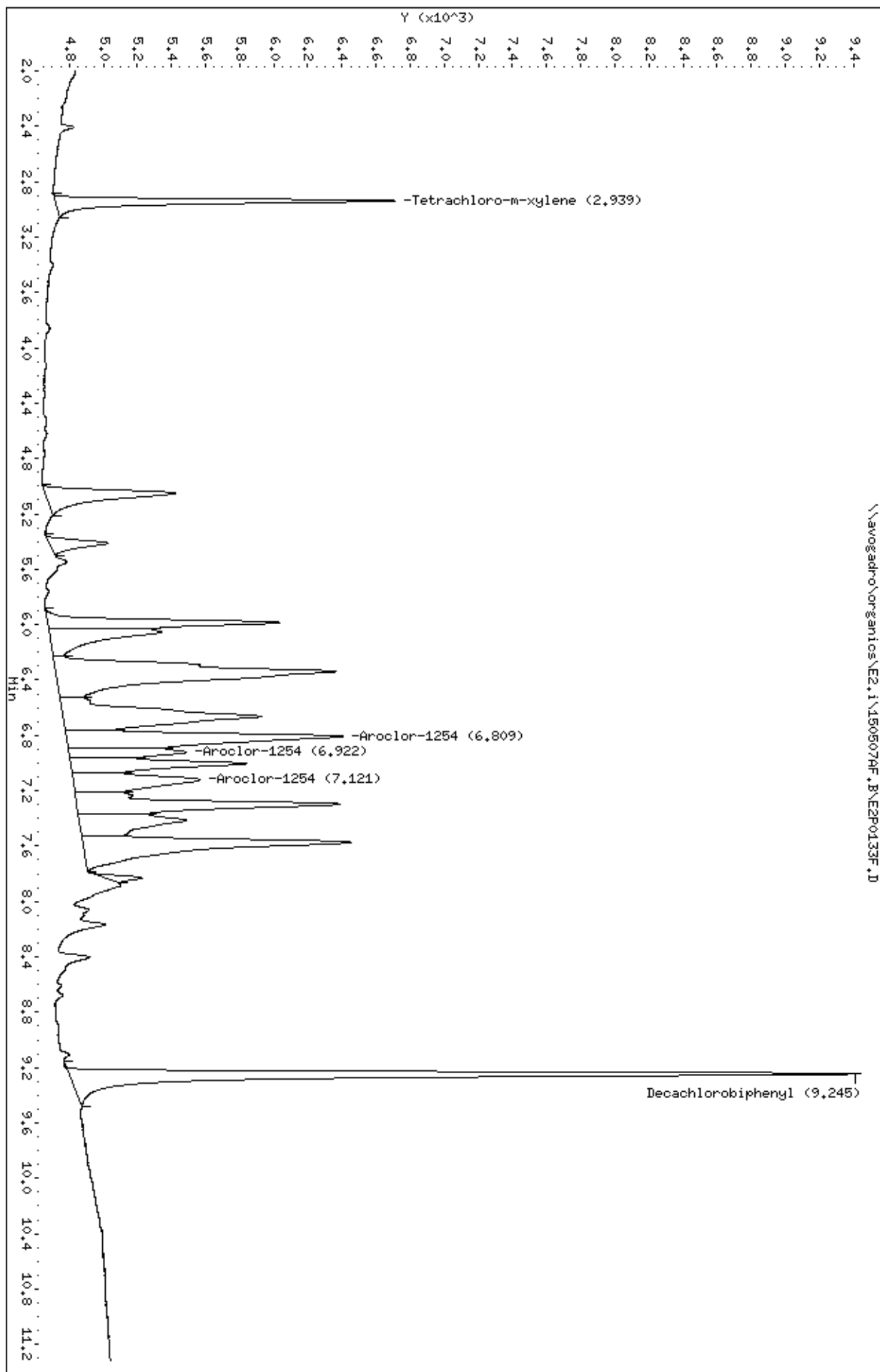
8 Aroclor-1254 CAS #: 11097-69-1						
6.808	6.799	0.009	1628 0.05000	0.050	80.00- 120.00	100.00(a)
6.921	6.918	0.003	692 0.05000	0.055	18.25- 58.25	42.51
7.120	7.105	0.015	743 0.05000	0.047	35.49- 75.49	45.64
Average of Peak Amounts =			0.05067			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\EP0133F.D
Date : 07-MAY-2015 18:05
Client ID: AR12546C2
Sample Info: AR12546C2,AR12546C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0133R.D
Lab Smp Id: AR12546C2 Client Smp ID: AR12546C2
Inj Date : 07-MAY-2015 18:05
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12546C2,AR12546C2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141R.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

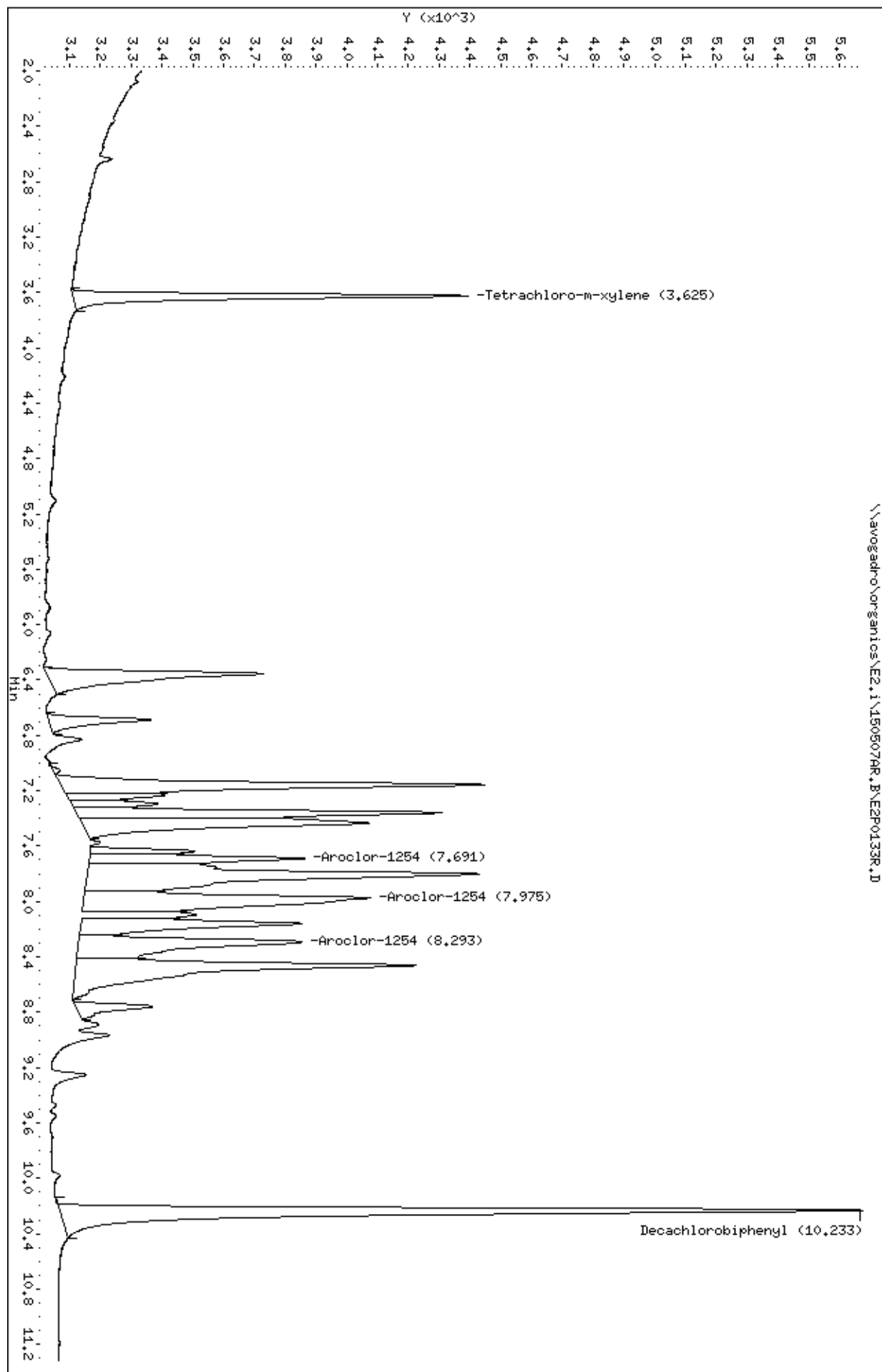
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.625	3.623	0.002	1282 0.00000	0.0023		(a)
\$ 11					CAS #: 2051-24-3	
10.232	10.227	0.005	2610 0.00000	0.0059		(a)
7					CAS #: 11097-69-1	
7.690	7.684	0.006	701 0.05000	0.044	80.00- 120.00	100.00(a)
7.975	7.968	0.007	928 0.05000	0.051	88.83- 128.83	132.38
8.293	8.291	0.002	725 0.05000	0.048	73.31- 113.31	103.42
Average of Peak Amounts =			0.04767			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0133R.D
Date : 07-MAY-2015 18:05
Client ID: AR12546C2
Sample Info: AR12546C2,AR12546C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0134F.D
 Lab Smp Id: AR12542C2 Client Smp ID: AR12542C2
 Inj Date : 07-MAY-2015 18:19
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12542C2,AR12542C2,,ar1254.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142F.D
 Als bottle: 17 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====							
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
2.937	2.936	0.001	7919 0.01000	0.010	(a)		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
9.242	9.241	0.001	491122 0.02000	0.021	(a)		

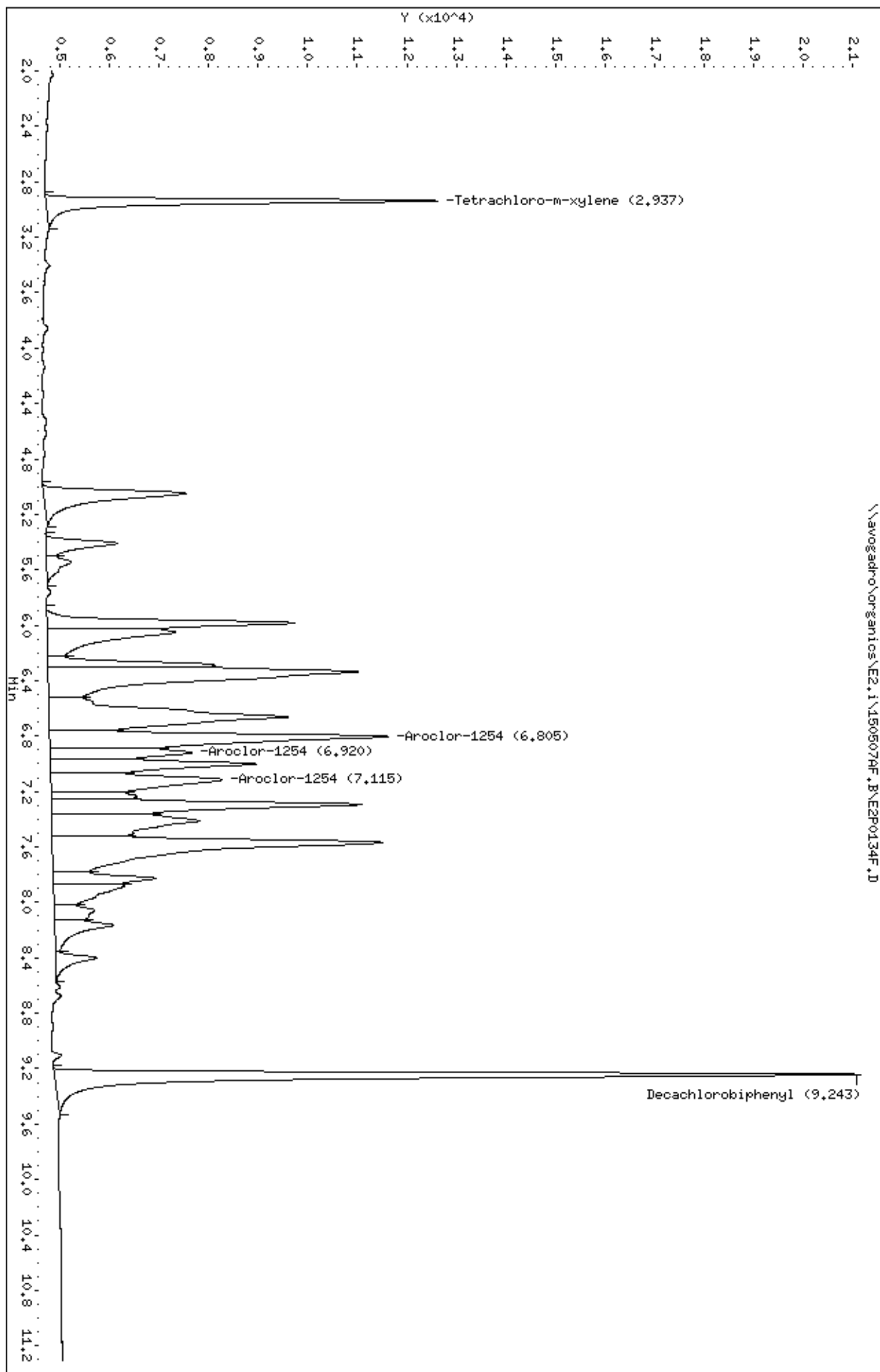
8	Aroclor-1254		CAS #: 11097-69-1				
6.804	6.799	0.005	6843 0.20000	0.21	80.00- 120.00	100.00(a)	
6.920	6.918	0.002	2871 0.20000	0.22	18.25- 58.25	41.96	
7.115	7.105	0.010	3458 0.20000	0.21	35.49- 75.49	50.53	
Average of Peak Amounts =			0.21333				

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,1\150507HF.B\EP0134F.D
Date : 07-MAY-2015 18:19
Client ID: AR12542C2
Sample Info: AR12542C2,AR12542C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0134R.D
 Lab Smp Id: AR12542C2 Client Smp ID: AR12542C2
 Inj Date : 07-MAY-2015 18:19
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12542C2,AR12542C2,,ar1254.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142R.D
 Als bottle: 17 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

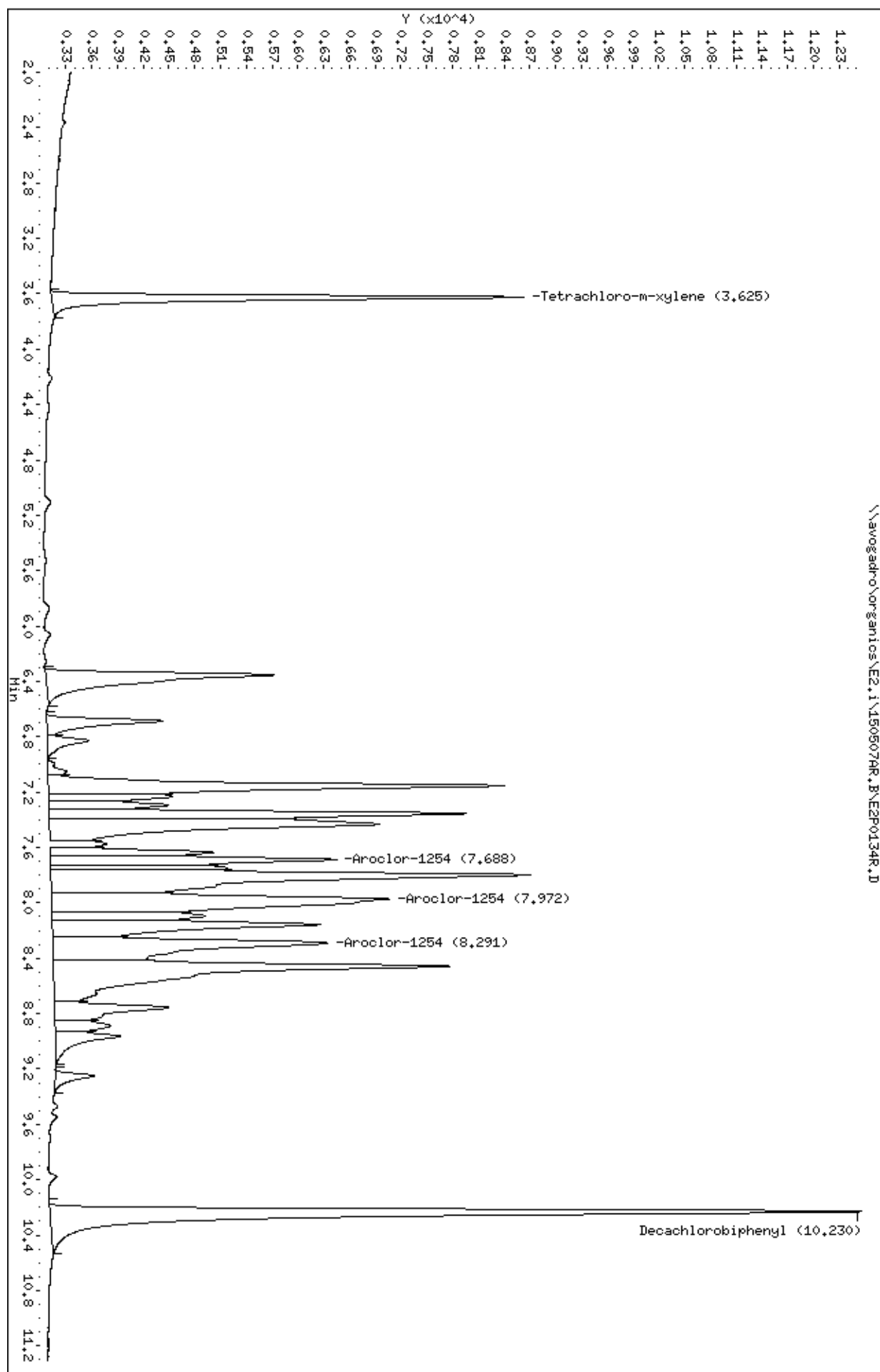
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.625	3.623	0.002	5497 0.01000	0.0097		(a)
\$ 11					CAS #: 2051-24-3	
10.229	10.227	0.002	9450 0.02000	0.021		(a)
7					CAS #: 11097-69-1	
7.688	7.684	0.004	3332 0.20000	0.21	80.00- 120.00	100.00(a)
7.972	7.968	0.004	3927 0.20000	0.21	88.83- 128.83	117.86
8.291	8.291	0.000	3195 0.20000	0.21	73.31- 113.31	95.89
Average of Peak Amounts =			0.21000			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0134R.D
 Date : 07-MAY-2015 18:19
 Client ID: AR12542C2
 Sample Info: AR12542C2,AR12542C2,,ar1254,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0135F.D
 Lab Smp Id: AR12543C2 Client Smp ID: AR12543C2
 Inj Date : 07-MAY-2015 18:34
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12543C2,AR12543C2,,ar1254.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 18 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL - AMT RESPONSE (ng)	ON - COL (ng)	TARGET RANGE	RATIO	
=====							
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
2.936	2.936	0.000	15824 0.02000	0.021	(a)		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
9.242	9.241	0.001	943949 0.04000	0.040	(a)		

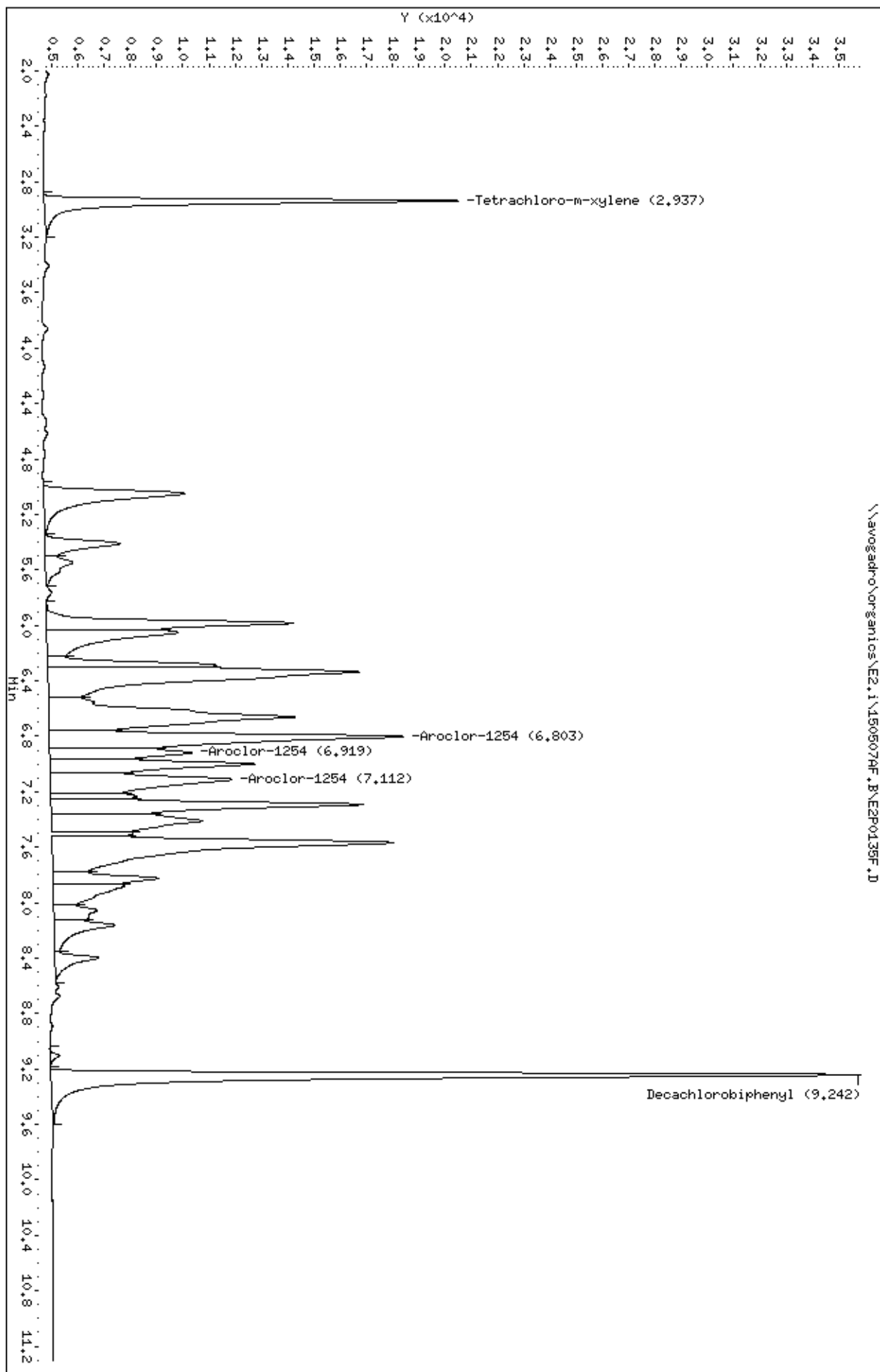
8	Aroclor-1254		CAS #: 11097-69-1				
6.802	6.799	0.003	13496 0.40000	0.41	80.00- 120.00	100.00(a)	
6.919	6.918	0.001	5440 0.40000	0.42	18.25- 58.25	40.31	
7.111	7.105	0.006	6934 0.40000	0.42	35.49- 75.49	51.38	
Average of Peak Amounts =			0.41667				

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0135F.D
Date : 07-MAY-2015 18:34
Client ID: AR1254302
Sample Info: AR1254302,AR1254302,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0135R.D
Lab Smp Id: AR12543C2 Client Smp ID: AR12543C2
Inj Date : 07-MAY-2015 18:34
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12543C2,AR12543C2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

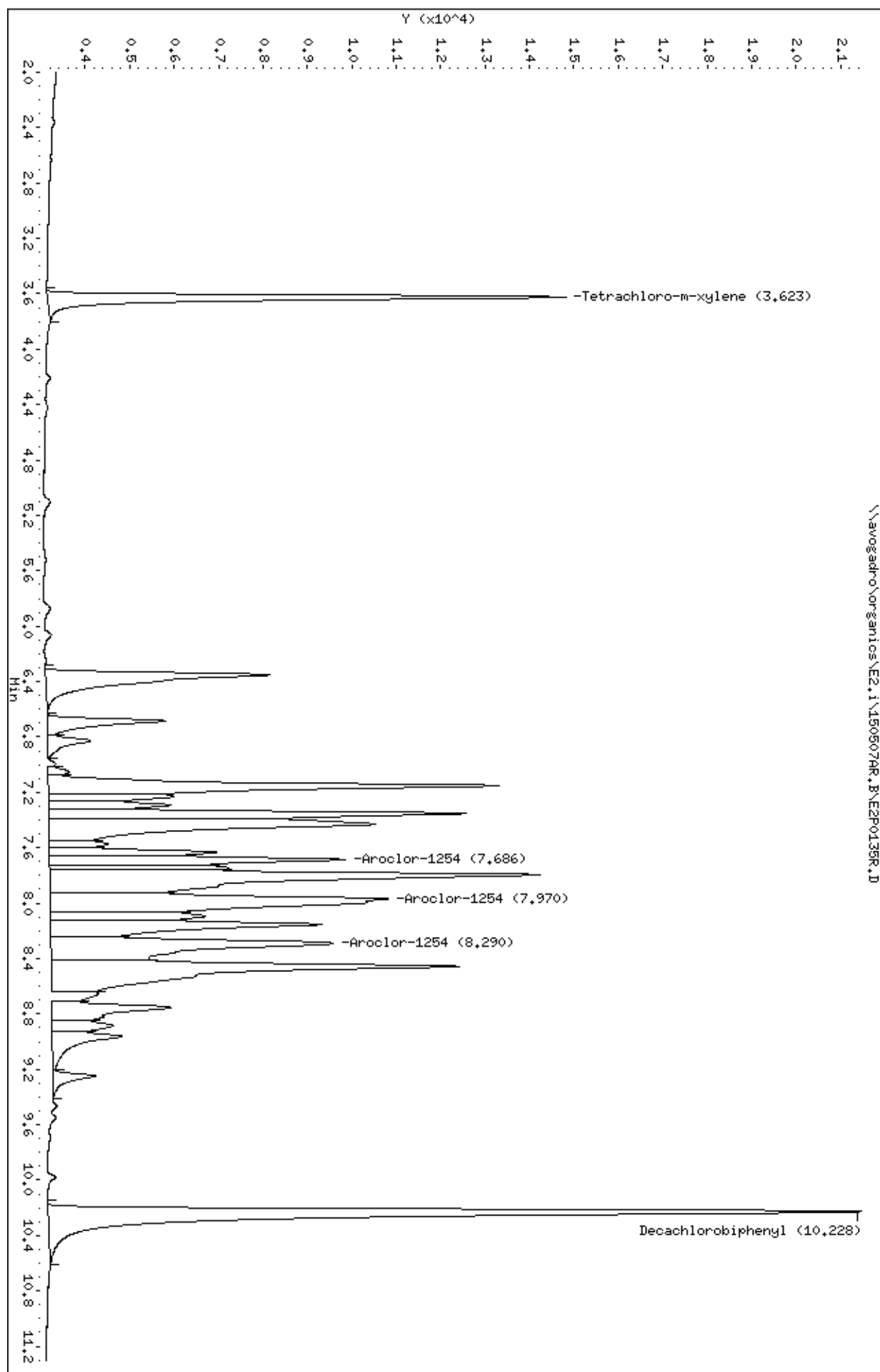
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.622	3.623	-0.001	11684 0.02000	0.021		(a)
\$ 11					CAS #: 2051-24-3	
10.228	10.227	0.001	18318 0.04000	0.041		(a)
7					CAS #: 11097-69-1	
7.686	7.684	0.002	6667 0.40000	0.42	80.00- 120.00	100.00(a)
7.970	7.968	0.002	7616 0.40000	0.41	88.83- 128.83	114.23
8.290	8.291	-0.001	6366 0.40000	0.41	73.31- 113.31	95.49
Average of Peak Amounts =			0.41333			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0135R.D
Date : 07-MAY-2015 18:34
Client ID: AR1254302
Sample Info: AR1254302,AR1254302,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0136F.D
 Lab Smp Id: AR12544C2 Client Smp ID: AR12544C2
 Inj Date : 07-MAY-2015 18:48
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12544C2,AR12544C2,,ar1254.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144F.D
 Als bottle: 19 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL - AMT RESPONSE (ng)	ON - COL (ng)	TARGET RANGE	RATIO	
=====							
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
2.936	2.936	0.000	29423 0.04000	0.038	(a)		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
9.242	9.241	0.001	1683655 0.08000	0.073			

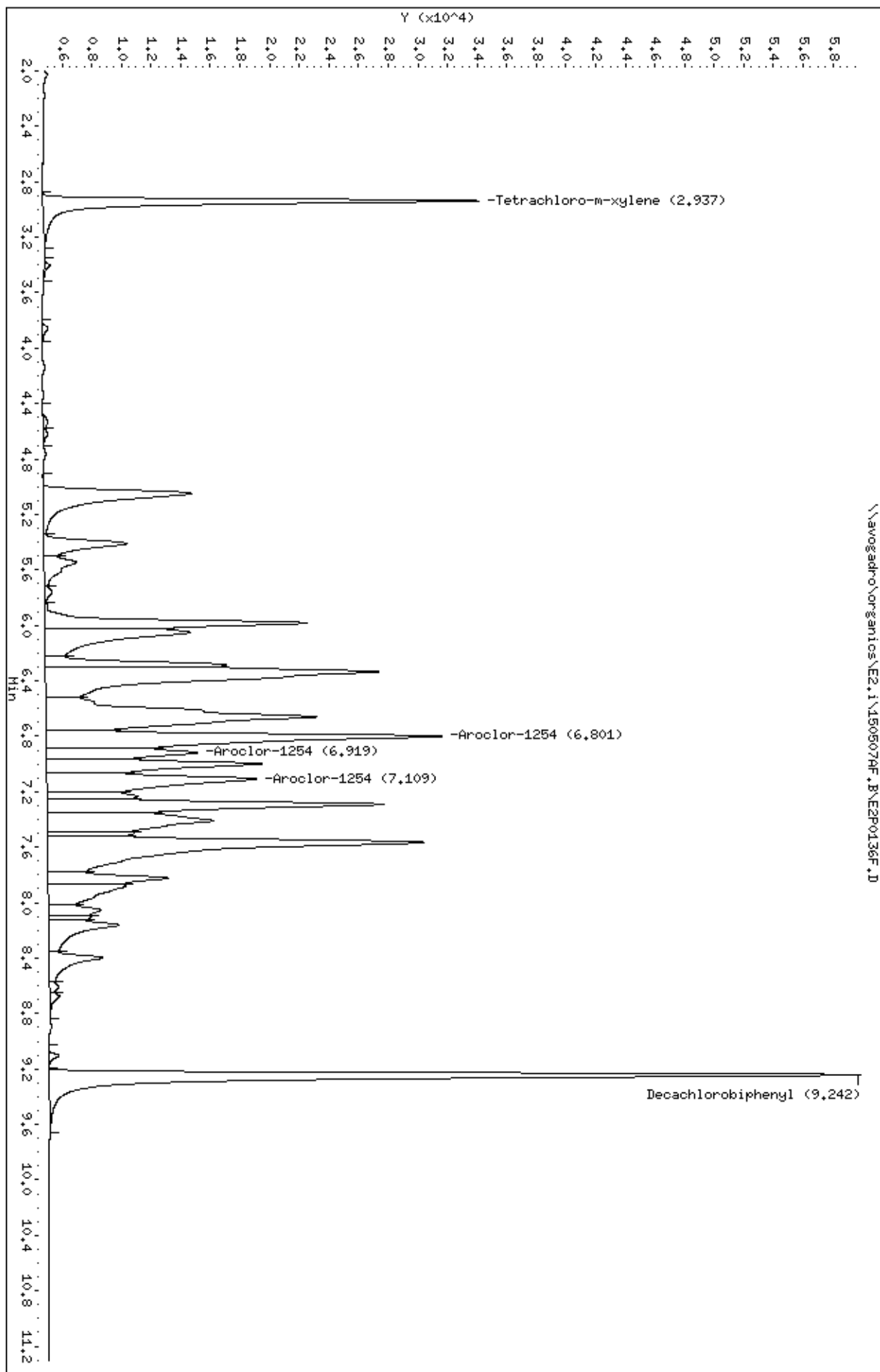
8	Aroclor-1254		CAS #: 11097-69-1				
6.800	6.799	0.001	26726 0.80000	0.81	80.00- 120.00	100.00(a)	
6.918	6.918	0.000	10216 0.80000	0.78	18.25- 58.25	38.22	
7.108	7.105	0.003	14133 0.80000	0.86	35.49- 75.49	52.88	
Average of Peak Amounts =			0.81667				

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0136F.D
Date : 07-MAY-2015 18:48
Client ID: AR12544C2
Sample Info: AR12544C2,AR12544C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0136R.D
 Lab Smp Id: AR12544C2 Client Smp ID: AR12544C2
 Inj Date : 07-MAY-2015 18:48
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12544C2,AR12544C2,,ar1254.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144R.D
 Als bottle: 19 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

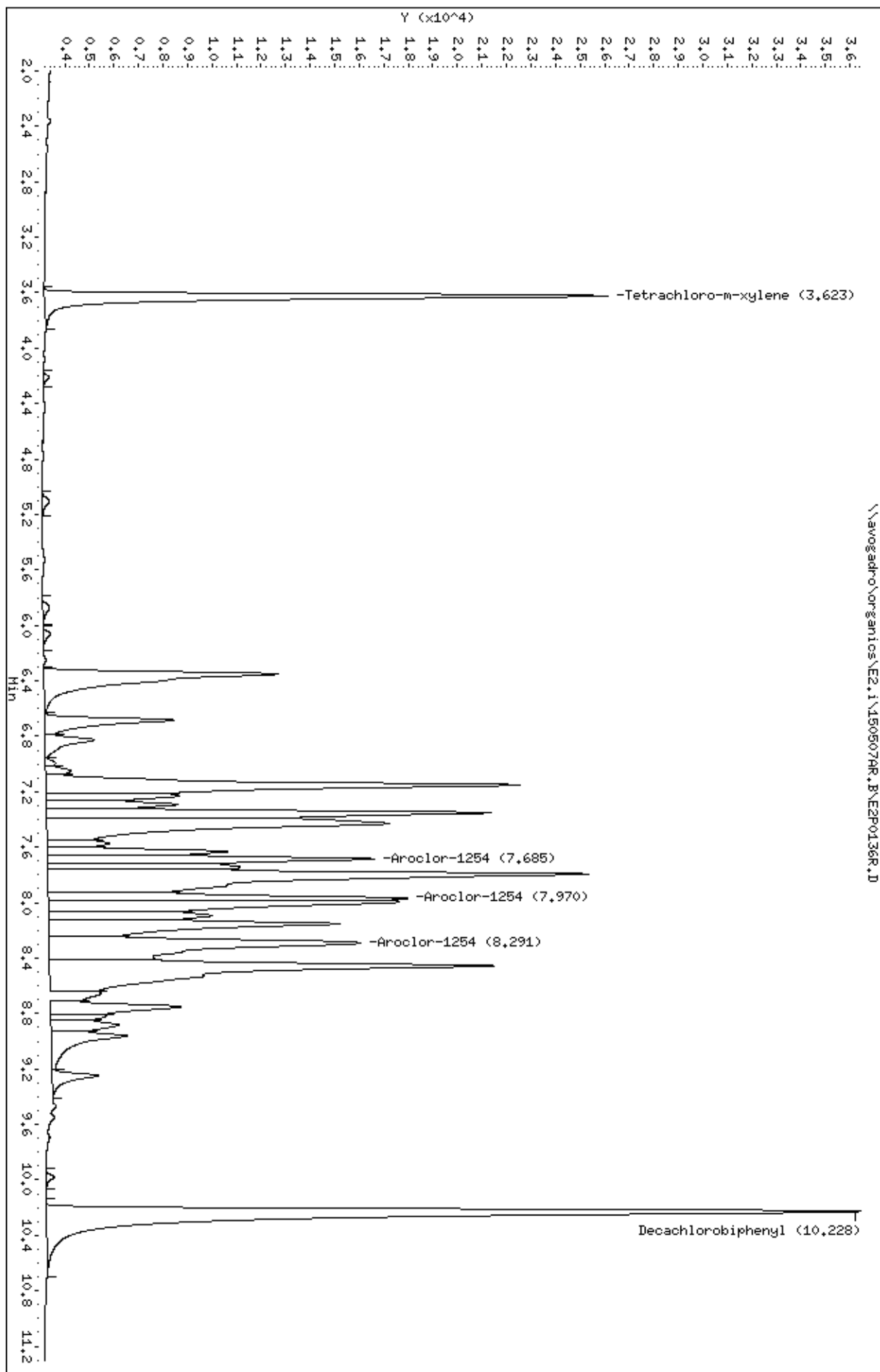
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.622	3.623	-0.001	23007 0.04000	0.041		(a)
\$ 11					CAS #: 2051-24-3	
10.228	10.227	0.001	33220 0.08000	0.074		
7					CAS #: 11097-69-1	
7.685	7.684	0.001	13362 0.80000	0.84	80.00- 120.00	100.00(a)
7.969	7.968	0.001	14622 0.80000	0.78	88.83- 128.83	109.43
8.290	8.291	-0.001	12694 0.80000	0.82	73.31- 113.31	95.00
Average of Peak Amounts =			0.81333			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0136R.D
Date : 07-MAY-2015 18:48
Client ID: AR12544C2
Sample Info: AR12544C2,AR12544C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0137F.D
 Lab Smp Id: AR12545C2 Client Smp ID: AR12545C2
 Inj Date : 07-MAY-2015 19:03
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12545C2,AR12545C2,,ar1254.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 20 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

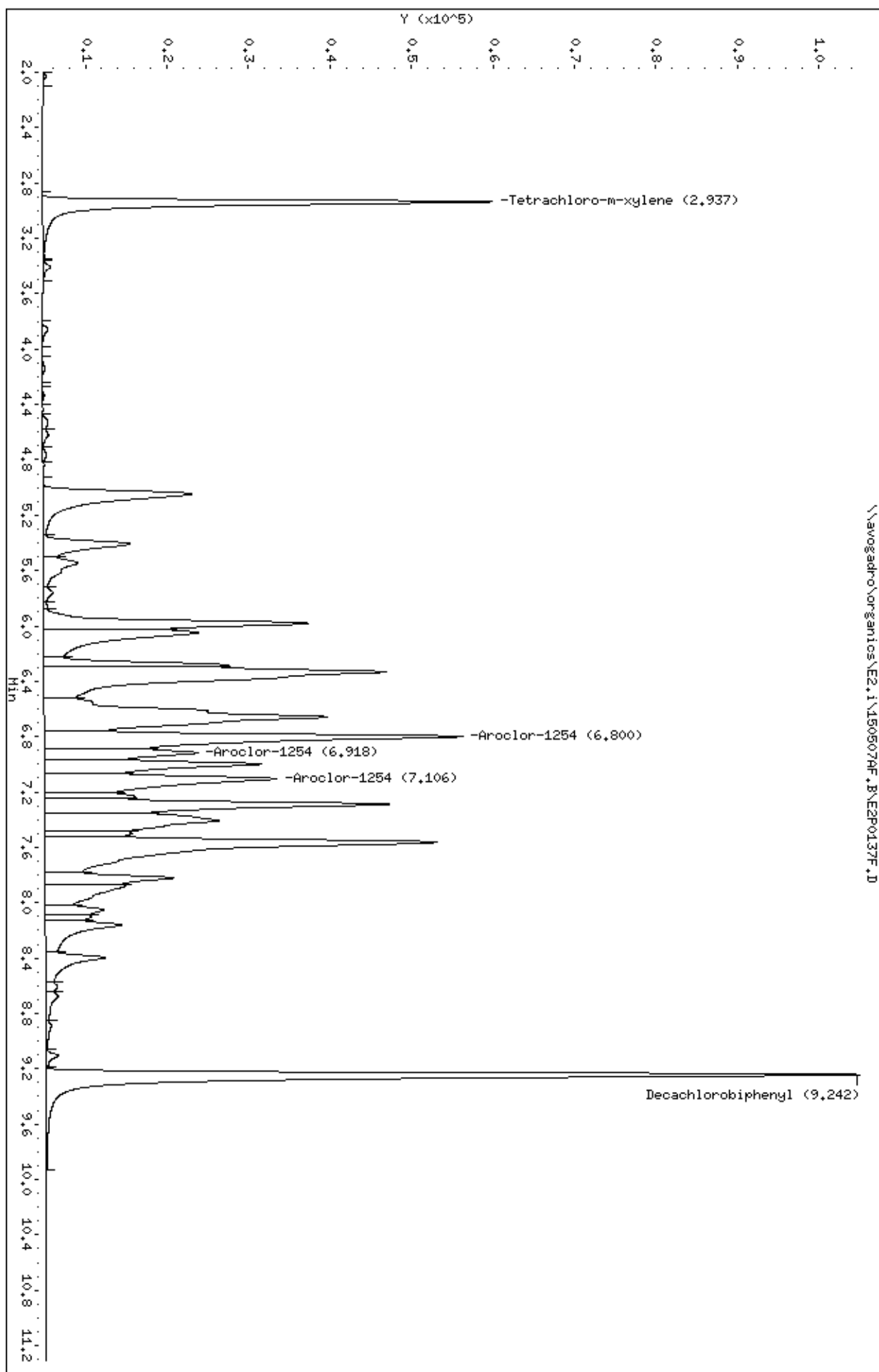
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.936	2.936	0.000	55235 0.08000	0.072		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.242	9.241	0.001	3132603 0.16000	0.14		

8 Aroclor-1254 CAS #: 11097-69-1						
6.799	6.799	0.000	51353 1.60000	1.6	80.00- 120.00	100.00
6.918	6.918	0.000	18829 1.60000	1.4	18.25- 58.25	36.67
7.105	7.105	0.000	28427 1.60000	1.7	35.49- 75.49	55.36
Average of Peak Amounts =			1.56667			

Data File: \\avogadro\organics\E2,i\150507HF,B\EP0137F.D
Date : 07-MAY-2015 19:03
Client ID: AR12545C2
Sample Info: AR12545C2,AR12545C2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0137R.D
Lab Smp Id: AR12545C2 Client Smp ID: AR12545C2
Inj Date : 07-MAY-2015 19:03
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12545C2,AR12545C2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

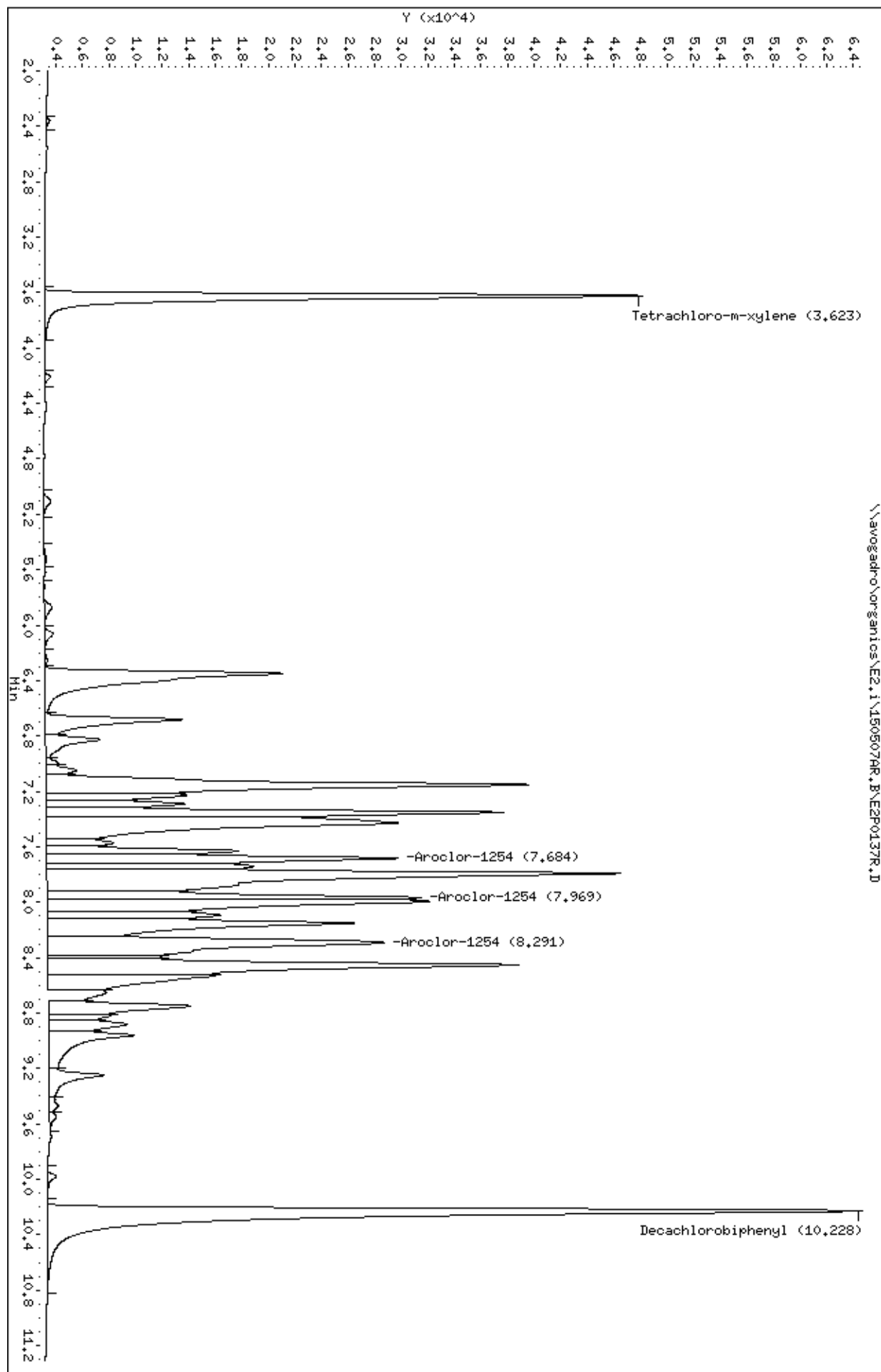
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.622	3.623	-0.001	45018 0.08000	0.080		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.228	10.227	0.001	61356 0.16000	0.14		

7 Aroclor-1254 CAS #: 11097-69-1						
7.684	7.684	0.000	26478 1.60000	1.6	80.00- 120.00	100.00
7.968	7.968	0.000	28096 1.60000	1.5	88.83- 128.83	106.11
8.291	8.291	0.000	25312 1.60000	1.6	73.31- 113.31	95.60
Average of Peak Amounts =			1.56667			

Data File: \\avogadro\organics\E2,i\150507AR,B\EP0137R.D
Date : 07-MAY-2015 19:03
Client ID: AR1254502
Sample Info: AR1254502,AR1254502,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0138F.D
 Lab Smp Id: AR12623C2 Client Smp ID: AR12623C2
 Inj Date : 07-MAY-2015 19:17
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12623C2,AR12623C2,,ar1262.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 21 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1262.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.937	2.936	0.001	15276	0.02000	0.020			(a)

2 Aroclor-1262					CAS #: 37324-23-5			
8.452	8.452	0.000	21498	0.40000	0.40	80.00-	120.00	100.00
8.683	8.683	0.000	6418	0.40000	0.40	9.85-	49.85	29.85
8.890	8.890	0.000	11555	0.40000	0.40	33.75-	73.75	53.75
Average of Peak Amounts =					0.40000			

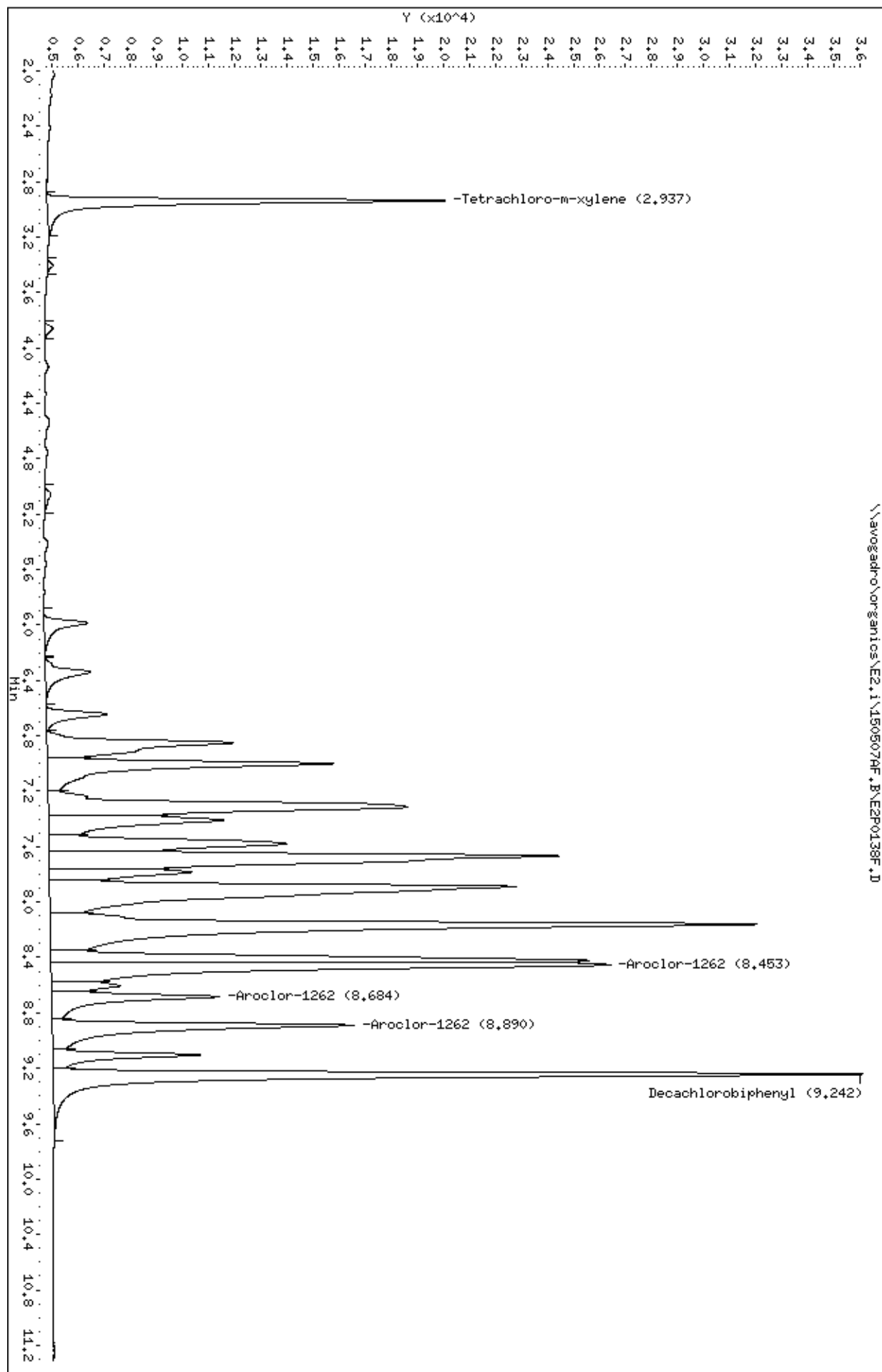
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.242	9.241	0.001	972977	0.04000	0.042			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0138F.D
Date : 07-MAY-2015 19:17
Client ID: AR1262302
Sample Info: AR1262302,AR1262302,,ar1262,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0138R.D
 Lab Smp Id: AR12623C2 Client Smp ID: AR12623C2
 Inj Date : 07-MAY-2015 19:17
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12623C2,AR12623C2,,ar1262.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
 Als bottle: 21 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1262.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.623	3.623	0.000	11320	0.02000	0.020		(a)

10 Aroclor-1262					CAS #: 37324-23-5		
8.961	8.961	0.000	18296	0.40000	0.40	80.00- 120.00	100.00(a)
9.240	9.240	0.000	15400	0.40000	0.40	64.17- 104.17	84.17
9.689	9.689	0.000	6587	0.40000	0.40	16.00- 56.00	36.00
Average of Peak Amounts =					0.40000		

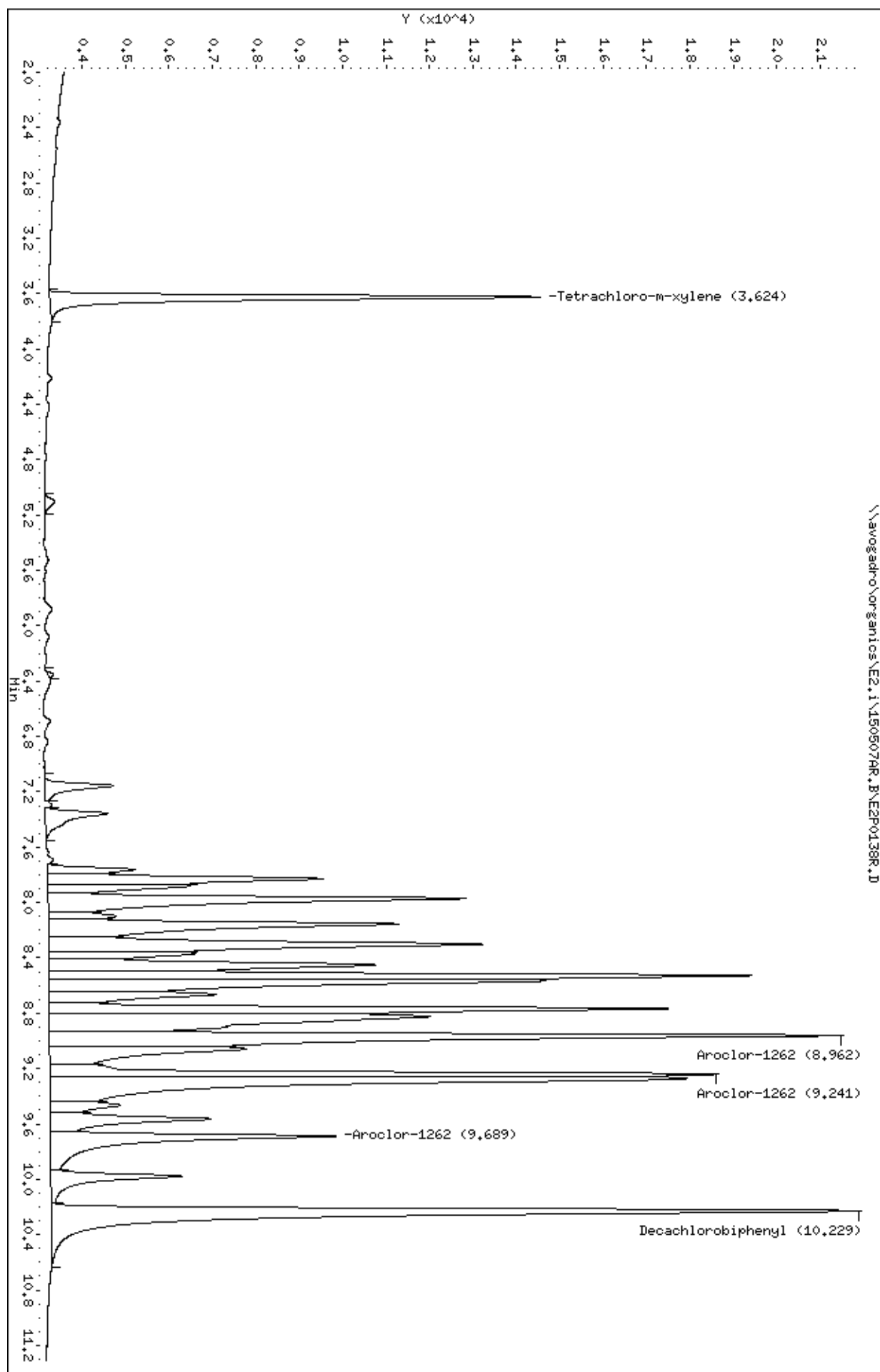
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.228	10.227	0.001	18673	0.04000	0.042		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0138R.D
 Date : 07-MAY-2015 19:17
 Client ID: AR1262302
 Sample Info: AR1262302,AR1262302,,ar1262,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0139F.D
 Lab Smp Id: AR12683C2 Client Smp ID: AR12683C2
 Inj Date : 07-MAY-2015 19:32
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12683C2,AR12683C2,,ar1268.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 22 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1268.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.936	2.936	0.000	15098	0.02000	0.020		(a)	

10 Aroclor-1268					CAS #: 11100-14-4			
8.669	8.669	0.000	14108	0.40000	0.40	80.00- 120.00	100.00(a)	
8.888	8.888	0.000	12880	0.40000	0.40	71.30- 111.30	91.30	
9.102	9.102	0.000	90652	0.40000	0.40	622.56- 662.56	642.56	
Average of Peak Amounts =					0.40000			

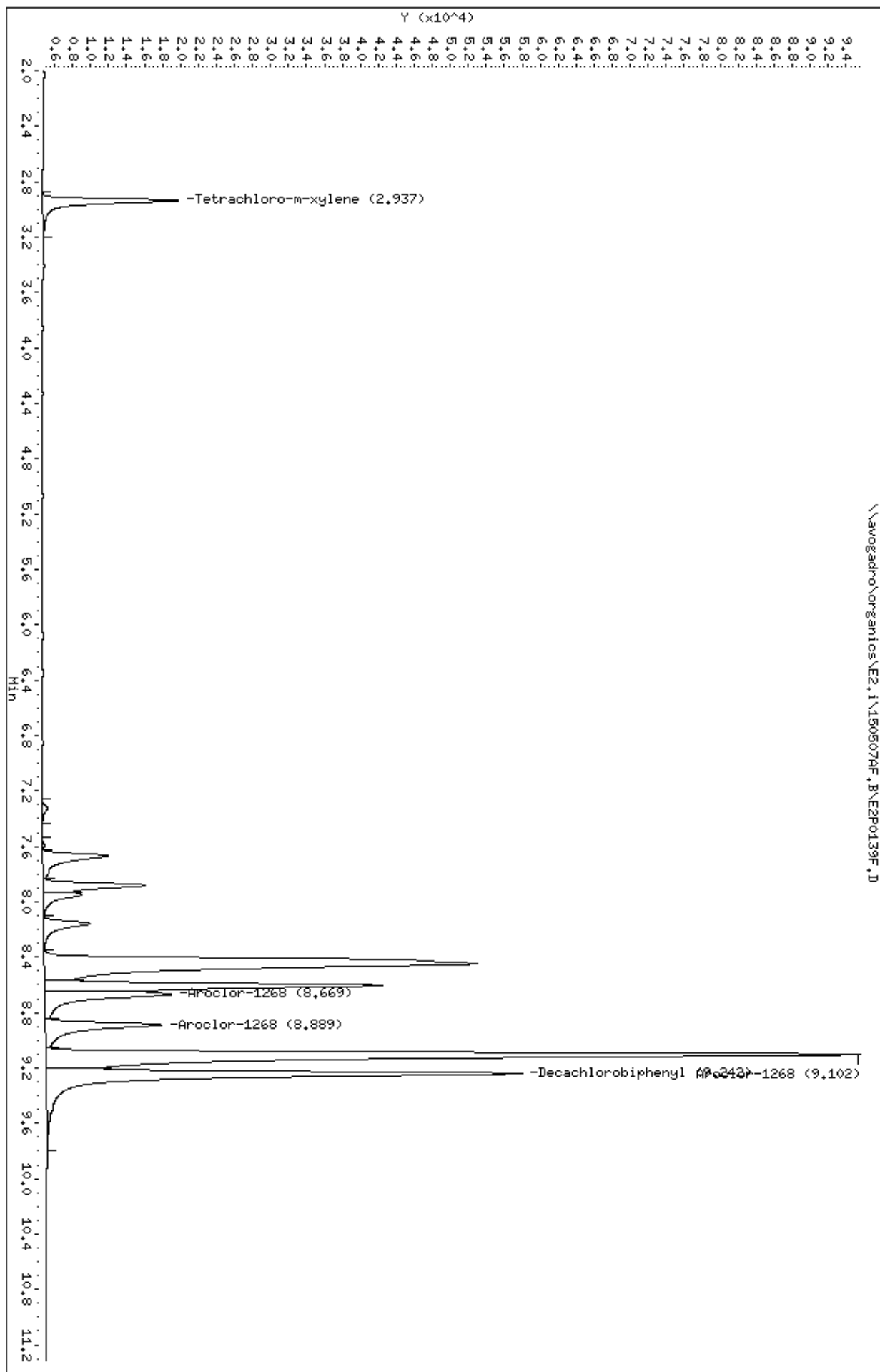
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.241	9.241	0.000	1793291	0.04000	0.066			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0139F.D
 Date : 07-MAY-2015 19:32
 Client ID: AR1268302
 Sample Info: AR1268302,AR1268302,,ar1268,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0139R.D
 Lab Smp Id: AR12683C2 Client Smp ID: AR12683C2
 Inj Date : 07-MAY-2015 19:32
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12683C2,AR12683C2,,ar1268.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
 Als bottle: 22 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1268.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS									
			CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
3.622	3.623	-0.001	11180	0.02000	0.020				(a)

9 Aroclor-1268					CAS #: 11100-14-4				
9.236	9.236	0.000	29275	0.40000	0.40	80.00-	120.00	100.00	(a)
9.464	9.464	0.000	27295	0.40000	0.40	73.24-	113.24	93.24	
9.973	9.973	0.000	52281	0.40000	0.40	158.59-	198.59	178.59	
Average of Peak Amounts =					0.40000				

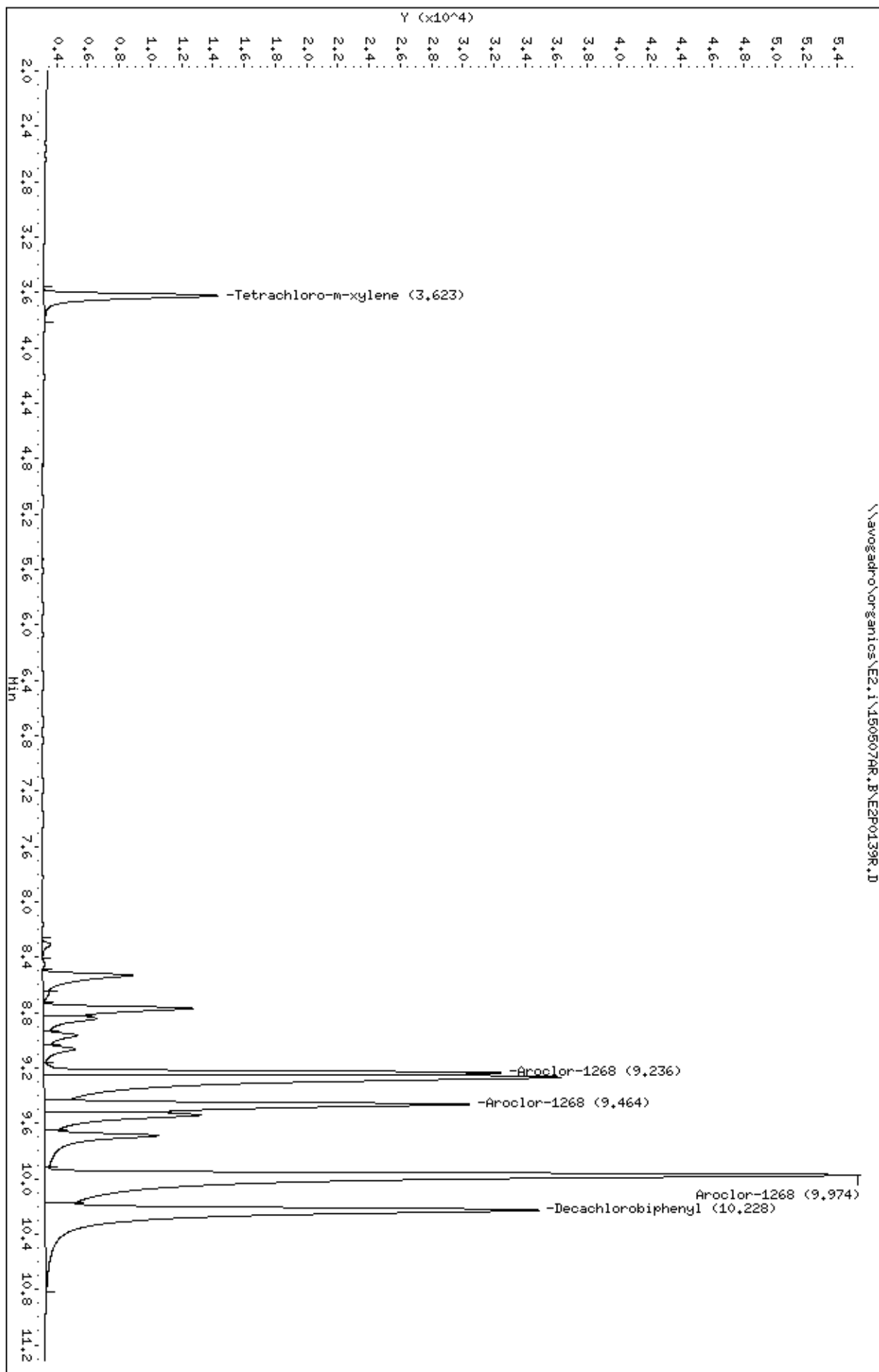
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3				
10.227	10.227	0.000	31606	0.04000	0.062				

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\EP0139R.D
Date : 07-MAY-2015 19:32
Client ID: AR1268302
Sample Info: AR1268302,AR1268302,,ar1268,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0140F.D
 Lab Smp Id: AR16601C2 Client Smp ID: AR16601C2
 Inj Date : 07-MAY-2015 19:46
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16601C2,AR16601C2,,ar1660.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140F.D
 Als bottle: 23 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.936	2.936	0.000	4085 0.00500	0.0054		(a)

5	Aroclor-1016		CAS #: 12674-11-2			
3.857	3.855	0.002	2753 0.10000	0.12	80.00- 120.00	100.00(a)
4.538	4.534	0.004	2220 0.10000	0.098	83.39- 123.39	80.64
5.554	5.551	0.003	980 0.10000	0.10	23.00- 63.00	35.60
Average of Peak Amounts =			0.10600			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.243	9.241	0.002	266131 0.01000	0.0097		(a)

9	Aroclor-1260		CAS #: 11096-82-5			
7.299	7.289	0.010	4747 0.10000	0.10	80.00- 120.00	100.00(a)
7.574	7.562	0.012	3856 0.10000	0.10	66.20- 106.20	81.23
8.164	8.157	0.007	5711 0.10000	0.10	108.17- 148.17	120.31
Average of Peak Amounts =			0.10000			

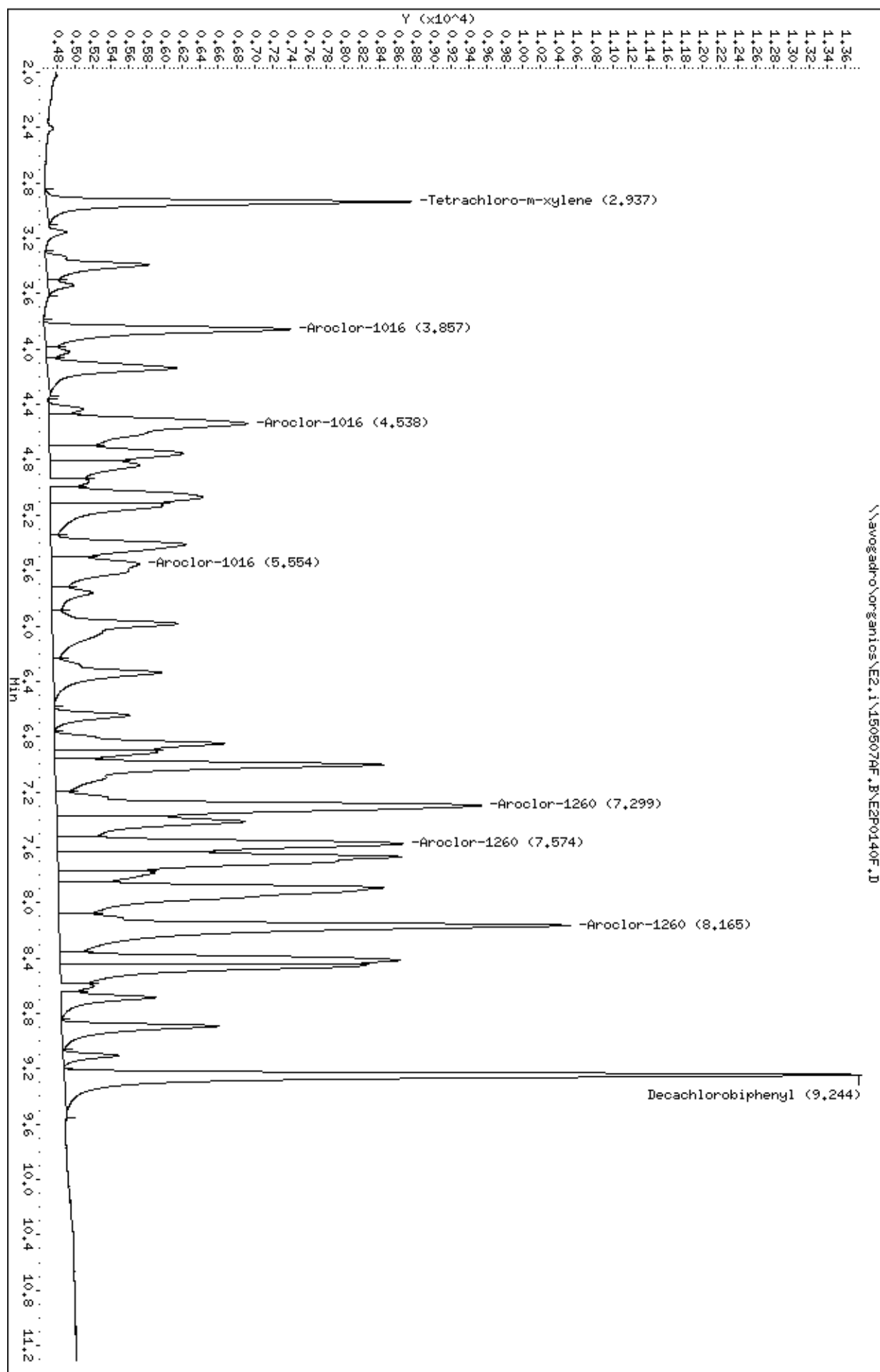
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0140F.D
Report Date: 11-May-2015 15:41

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0140F.D
 Date: 07-MAY-2015 19:46
 Client ID: AR16601C2
 Sample Info: AR16601C2,AR16601C2,,ar1660,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0140R.D
 Lab Smp Id: AR16601C2 Client Smp ID: AR16601C2
 Inj Date : 07-MAY-2015 19:46
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16601C2,AR16601C2,,ar1660.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 19:46 Cal File: E2P0140R.D
 Als bottle: 23 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	2677	0.00500	0.0048			(a)

6 Aroclor-1016					CAS #: 12674-11-2			
5.104	5.100	0.004	1977	0.10000	0.11	80.00-	120.00	100.00(a)
5.876	5.871	0.005	1856	0.10000	0.097	90.59-	130.59	93.88
6.685	6.681	0.004	1381	0.10000	0.10	58.70-	98.70	69.85
Average of Peak Amounts =					0.10233			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.230	10.227	0.003	5243	0.01000	0.010			(a)

8 Aroclor-1260					CAS #: 11096-82-5			
7.973	7.968	0.005	3166	0.10000	0.10	80.00-	120.00	100.00(a)
8.456	8.450	0.006	2912	0.10000	0.10	80.01-	120.01	91.98
8.965	8.958	0.007	3823	0.10000	0.100	105.59-	145.59	120.75
Average of Peak Amounts =					0.10000			

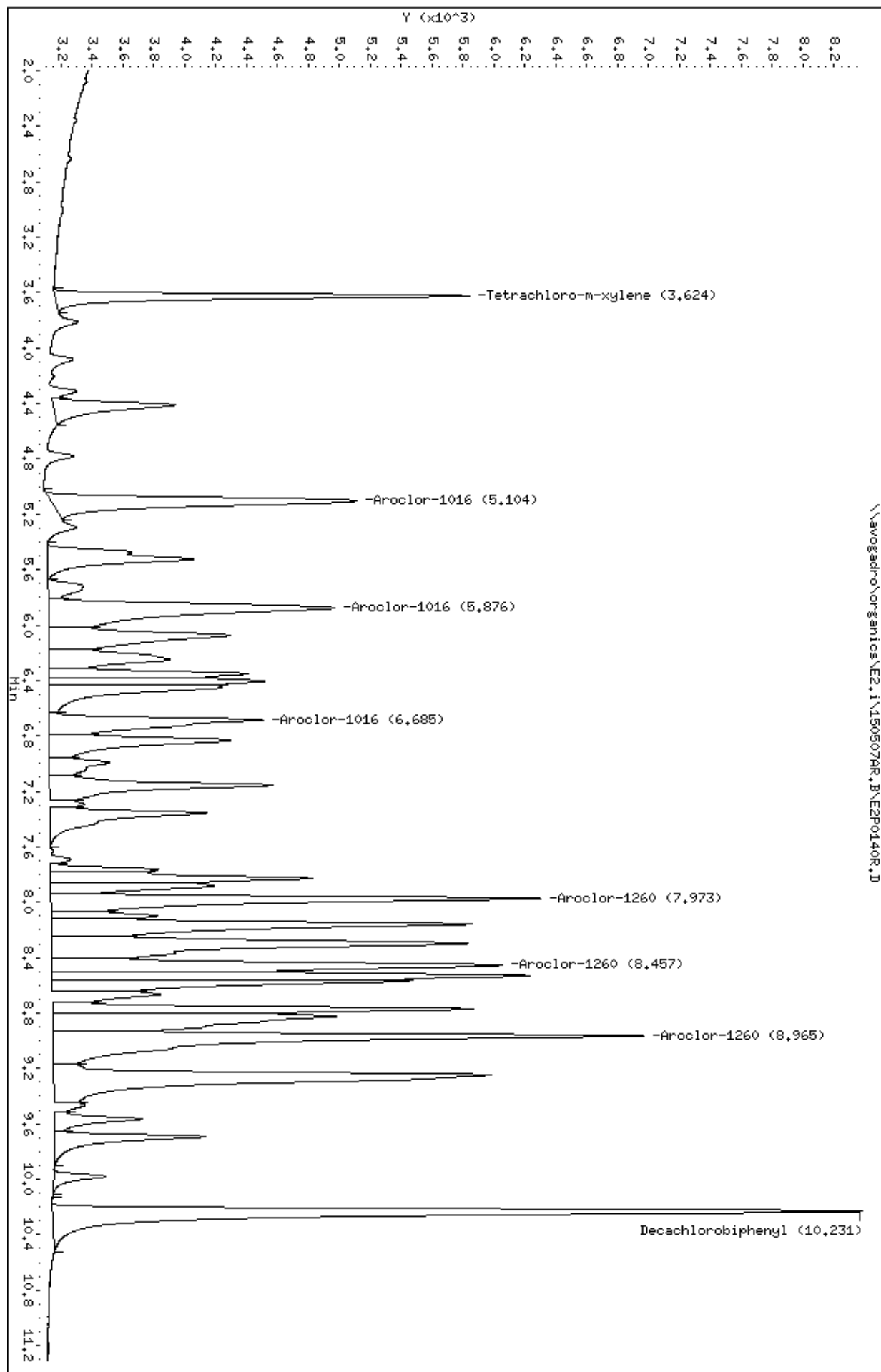
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0140R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\EP0140R.D
Date : 07-MAY-2015 19:46
Client ID: AR16601C2
Sample Info: AR16601C2,AR16601C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0141F.D
 Lab Smp Id: AR16606C2 Client Smp ID: AR16606C2
 Inj Date : 07-MAY-2015 20:00
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16606C2,AR16606C2,,ar1660.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141F.D
 Als bottle: 24 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.937	2.936	0.001	2073 0.00000	0.0027		(a)	

5 Aroclor-1016				CAS #: 12674-11-2			
3.858	3.855	0.003	1466 0.05000	0.059	80.00- 120.00	100.00(a)	
4.538	4.534	0.004	1130 0.05000	0.049	83.39- 123.39	77.08	
5.555	5.551	0.004	427 0.05000	0.044	23.00- 63.00	29.13	
Average of Peak Amounts =				0.05067			

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.245	9.241	0.004	142673 0.00000	0.0060		(a)	

9 Aroclor-1260				CAS #: 11096-82-5			
7.302	7.289	0.013	2532 0.05000	0.056	80.00- 120.00	100.00(a)	
7.576	7.562	0.014	2034 0.05000	0.053	66.20- 106.20	80.33	
8.166	8.157	0.009	2989 0.05000	0.053	108.17- 148.17	118.05	
Average of Peak Amounts =				0.05400			

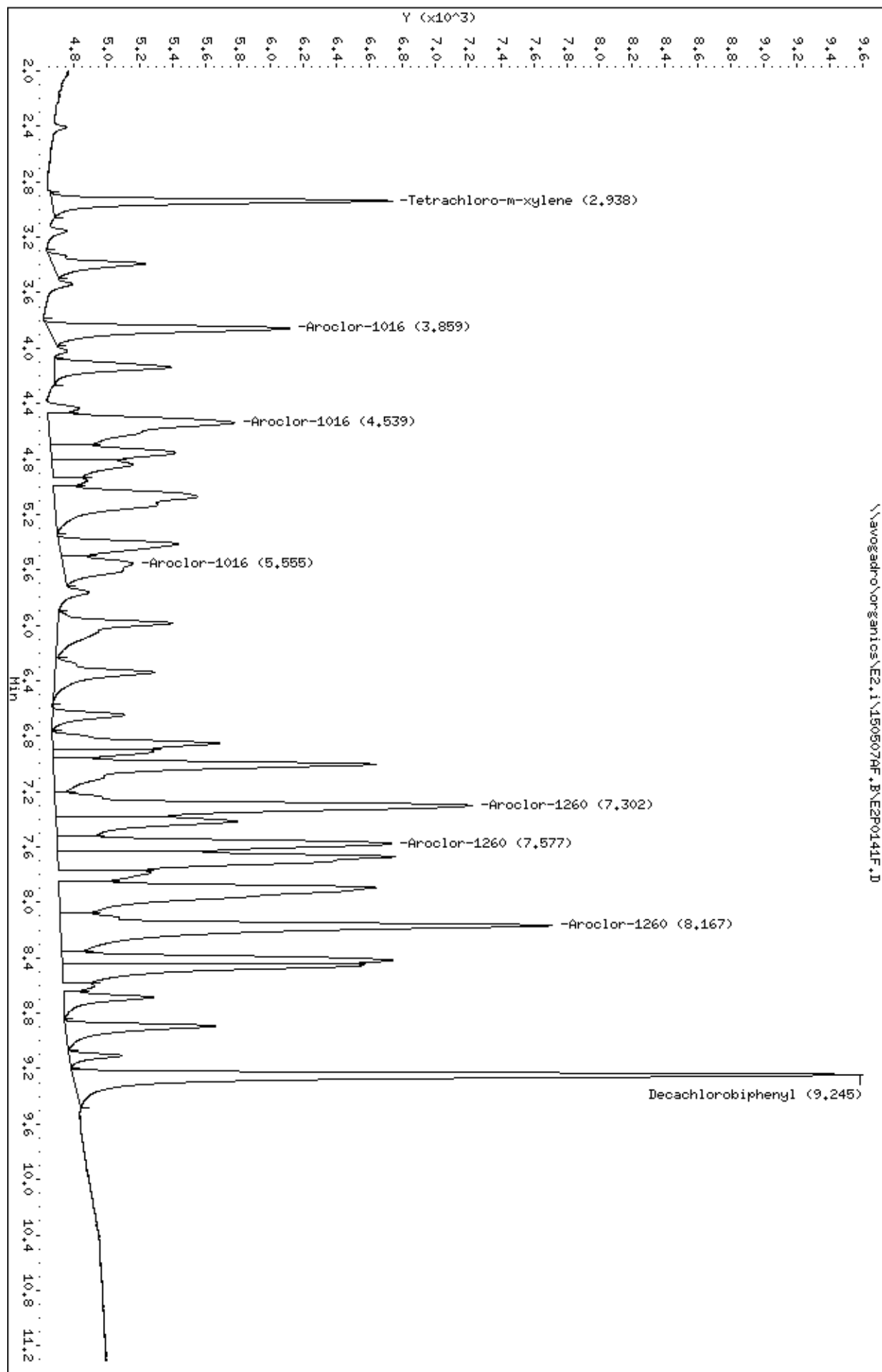
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0141F.D
Report Date: 11-May-2015 15:41

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0141F.D
Date : 07-MAY-2015 20:00
Client ID: AR16606C2
Sample Info: AR16606C2,AR16606C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0141R.D
Lab Smp Id: AR16606C2 Client Smp ID: AR16606C2
Inj Date : 07-MAY-2015 20:00
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16606C2,AR16606C2,,ar1660.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:00 Cal File: E2P0141R.D
Als bottle: 24 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.624	3.623	0.001	1330	0.00000	0.0024			(a)

6 Aroclor-1016					CAS #: 12674-11-2			
5.104	5.100	0.004	1065	0.05000	0.058	80.00-	120.00	100.00(a)
5.877	5.871	0.006	905	0.05000	0.048	90.59-	130.59	84.98
6.685	6.681	0.004	682	0.05000	0.050	58.70-	98.70	64.04
Average of Peak Amounts =					0.05200			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.232	10.227	0.005	2803	0.00000	0.0054			(a)

8 Aroclor-1260					CAS #: 11096-82-5			
7.974	7.968	0.006	1674	0.05000	0.055	80.00-	120.00	100.00(a)
8.459	8.450	0.009	1510	0.05000	0.052	80.01-	120.01	90.20
8.967	8.958	0.009	2004	0.05000	0.052	105.59-	145.59	119.71
Average of Peak Amounts =					0.05300			

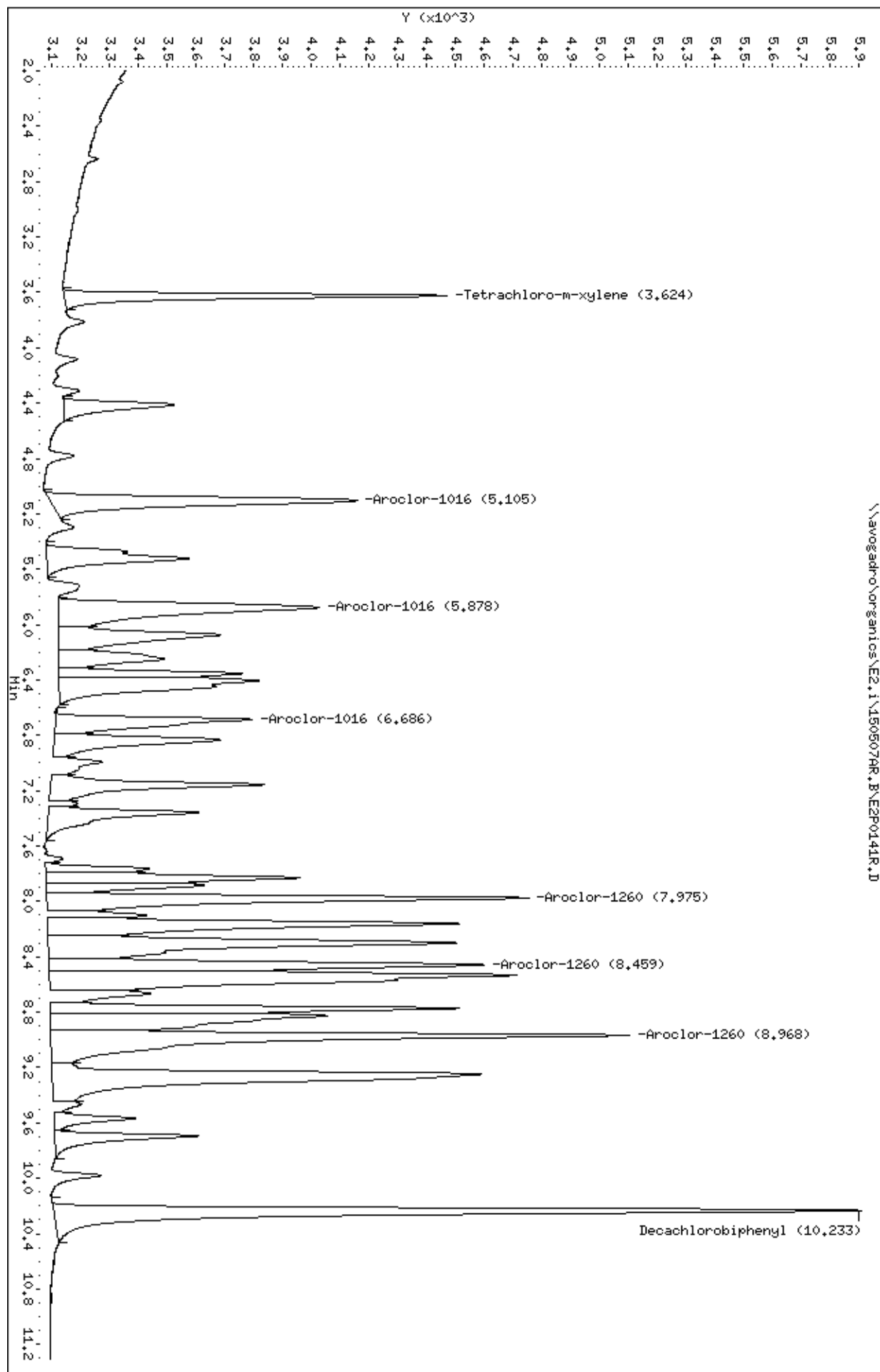
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0141R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0141R.D
 Date : 07-MAY-2015 20:00
 Client ID: AR16606C2
 Sample Info: AR16606C2,AR16606C2,,ar1660,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0142F.D
 Lab Smp Id: AR16602C2 Client Smp ID: AR16602C2
 Inj Date : 07-MAY-2015 20:15
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16602C2,AR16602C2,,ar1660.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142F.D
 Als bottle: 25 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.936	2.936	0.000	7959 0.01000	0.010		(a)	

5 Aroclor-1016				CAS #: 12674-11-2			
3.857	3.855	0.002	5163 0.20000	0.21	80.00- 120.00	100.00(a)	
4.537	4.534	0.003	4584 0.20000	0.20	83.39- 123.39	88.79	
5.553	5.551	0.002	2028 0.20000	0.21	23.00- 63.00	39.28	
Average of Peak Amounts =				0.20667			

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.243	9.241	0.002	495575 0.02000	0.021		(a)	

9 Aroclor-1260				CAS #: 11096-82-5			
7.296	7.289	0.007	9243 0.20000	0.20	80.00- 120.00	100.00(a)	
7.571	7.562	0.009	7657 0.20000	0.20	66.20- 106.20	82.84	
8.163	8.157	0.006	11301 0.20000	0.20	108.17- 148.17	122.27	
Average of Peak Amounts =				0.20000			

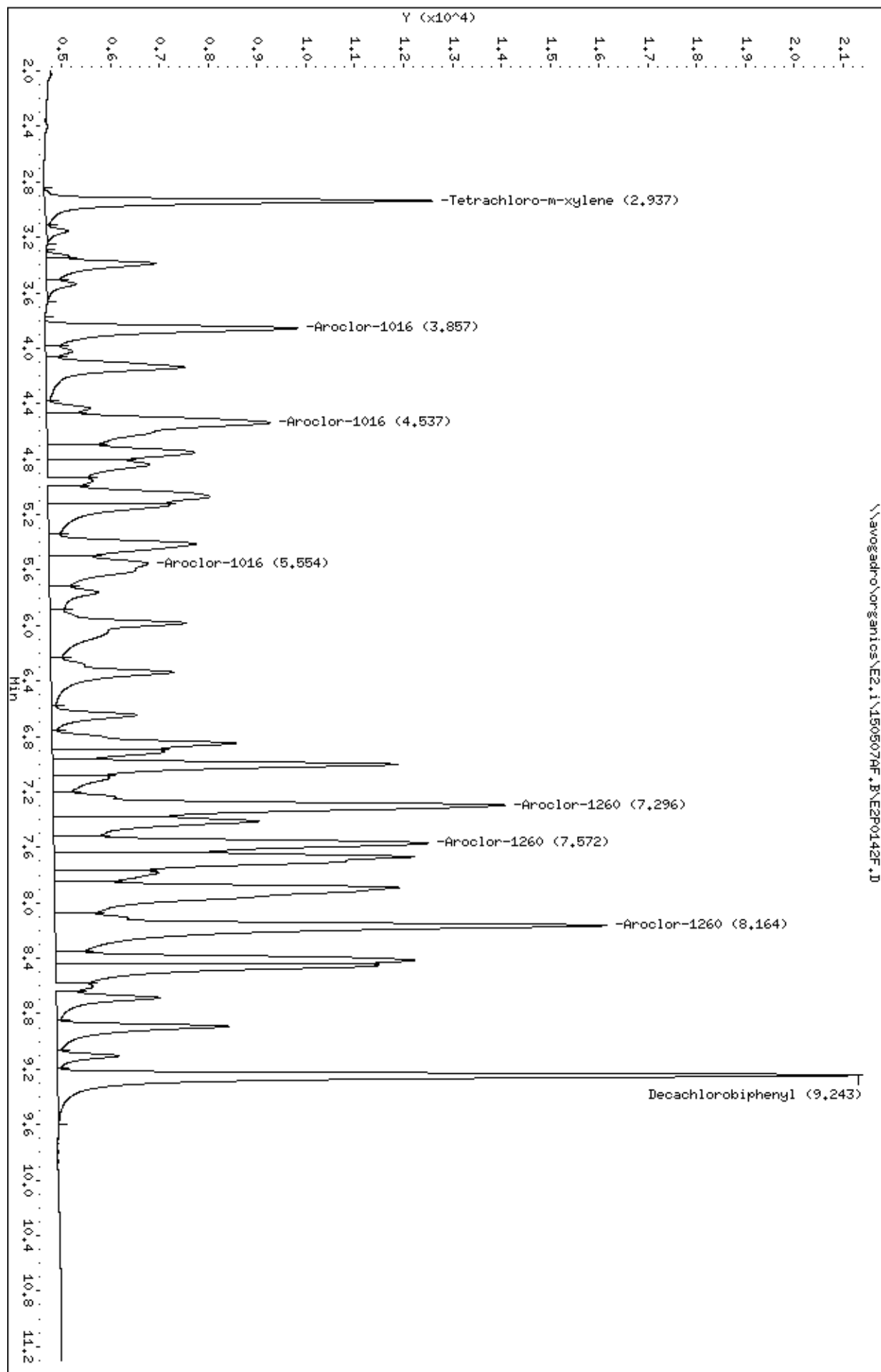
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0142F.D
Report Date: 11-May-2015 15:41

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0142F.D
Date : 07-MAY-2015 20:15
Client ID: AR16602C2
Sample Info: AR16602C2,AR16602C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0142R.D
 Lab Smp Id: AR16602C2 Client Smp ID: AR16602C2
 Inj Date : 07-MAY-2015 20:15
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16602C2,AR16602C2,,ar1660.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:15 Cal File: E2P0142R.D
 Als bottle: 25 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	5496 0.01000	0.0099		(a)

6	Aroclor-1016		CAS #: 12674-11-2			
5.102	5.100	0.002	3831 0.20000	0.21 80.00- 120.00	100.00(a)	
5.874	5.871	0.003	3815 0.20000	0.20 90.59- 130.59	99.58	
6.684	6.681	0.003	2787 0.20000	0.20 58.70- 98.70	72.75	
Average of Peak Amounts =			0.20333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.229	10.227	0.002	9910 0.02000	0.019		(a)

8	Aroclor-1260		CAS #: 11096-82-5			
7.972	7.968	0.004	6254 0.20000	0.20 80.00- 120.00	100.00(a)	
8.455	8.450	0.005	5858 0.20000	0.20 80.01- 120.01	93.67	
8.963	8.958	0.005	7699 0.20000	0.20 105.59- 145.59	123.11	
Average of Peak Amounts =			0.20000			

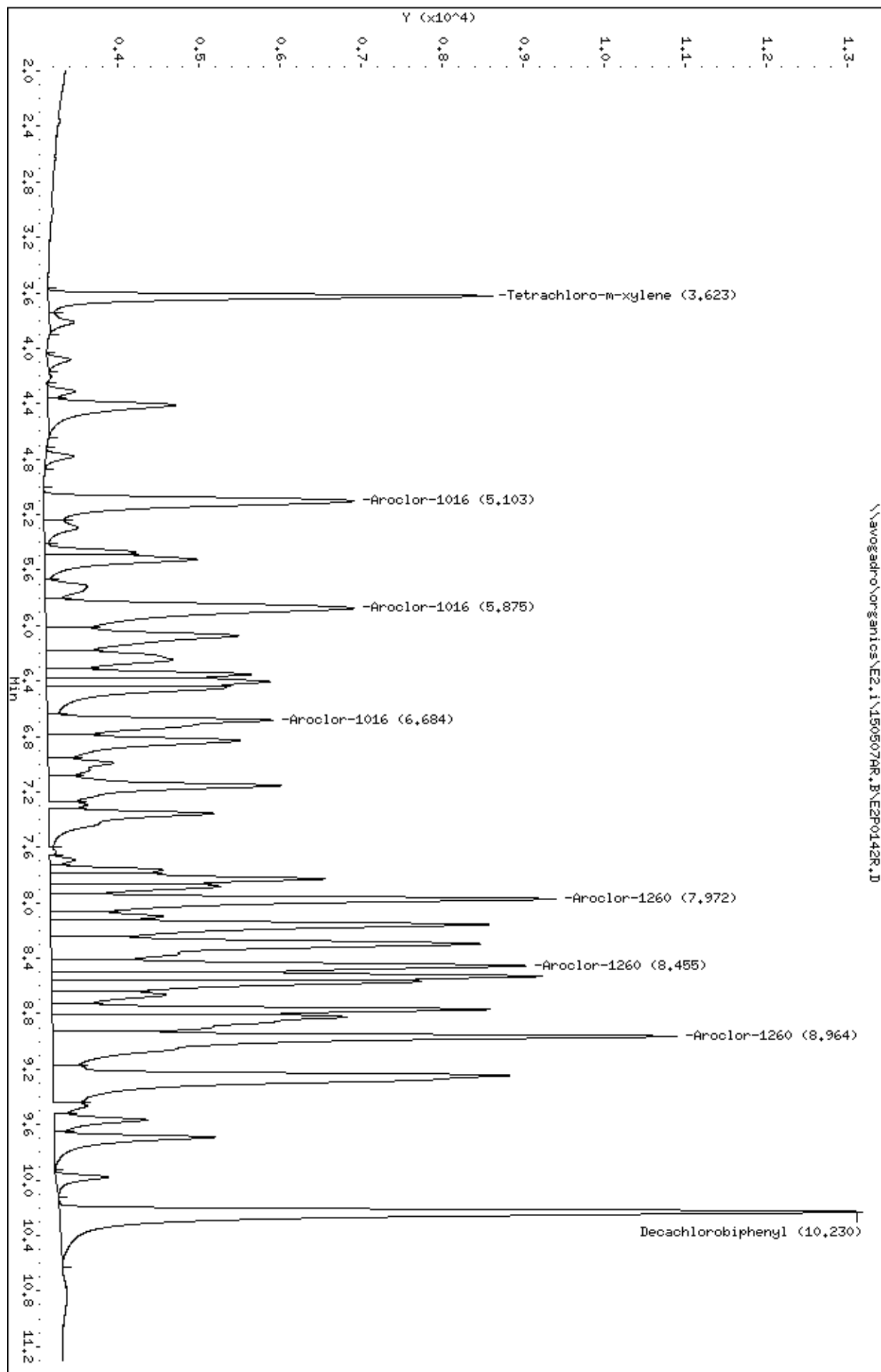
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0142R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\EP0142R.D
Date : 07-MAY-2015 20:15
Client ID: AR16602C2
Sample Info: AR16602C2,AR16602C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0143F.D
 Lab Smp Id: AR16603C2 Client Smp ID: AR16603C2
 Inj Date : 07-MAY-2015 20:29
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603C2,AR16603C2,,ar1660.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143F.D
 Als bottle: 26 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.937	2.936	0.001	16129 0.02000	0.021		(a)

5 Aroclor-1016 CAS #: 12674-11-2						
3.856	3.855	0.001	9805 0.40000	0.39	80.00- 120.00	100.00(a)
4.536	4.534	0.002	9368 0.40000	0.41	83.39- 123.39	95.54
5.553	5.551	0.002	4170 0.40000	0.43	23.00- 63.00	42.53
Average of Peak Amounts =			0.41000			

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.242	9.241	0.001	981692 0.04000	0.042		(a)

9 Aroclor-1260 CAS #: 11096-82-5						
7.294	7.289	0.005	18476 0.40000	0.40	80.00- 120.00	100.00(a)
7.568	7.562	0.006	15653 0.40000	0.41	66.20- 106.20	84.72
8.161	8.157	0.004	23234 0.40000	0.41	108.17- 148.17	125.75
Average of Peak Amounts =			0.40667			

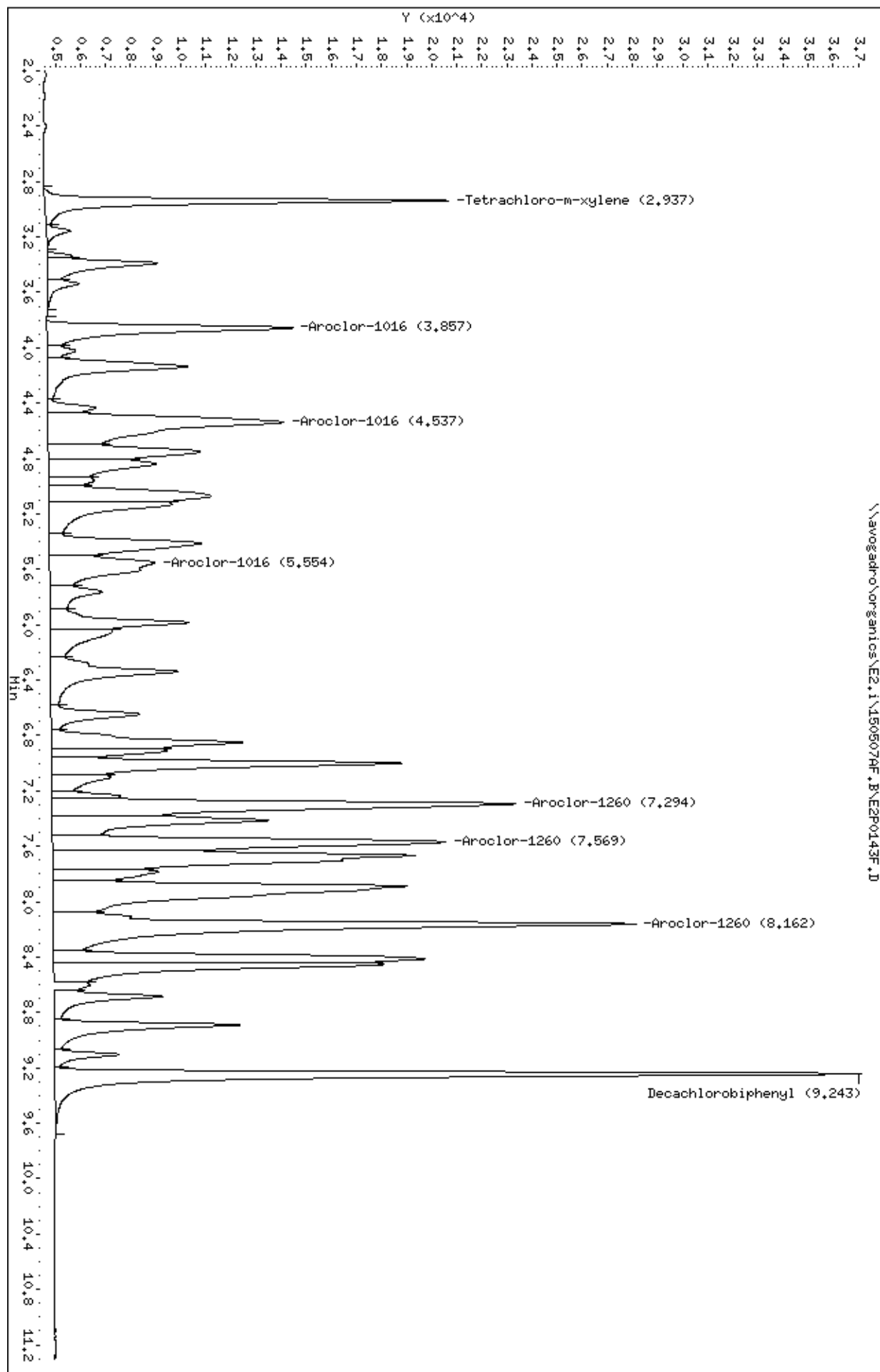
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0143F.D
Report Date: 11-May-2015 15:41

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0143F.D
 Date : 07-MAY-2015 20:29
 Client ID: AR1660302
 Sample Info: AR1660302,AR1660302,,ar1660,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0143R.D
Lab Smp Id: AR16603C2 Client Smp ID: AR16603C2
Inj Date : 07-MAY-2015 20:29
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603C2,AR16603C2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:29 Cal File: E2P0143R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	11892 0.02000	0.021		(a)

6	Aroclor-1016		CAS #: 12674-11-2			
5.102	5.100	0.002	7388 0.40000	0.40	80.00- 120.00	100.00(a)
5.874	5.871	0.003	7946 0.40000	0.41	90.59- 130.59	107.55
6.683	6.681	0.002	5727 0.40000	0.42	58.70- 98.70	77.52
Average of Peak Amounts =			0.41000			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.228	10.227	0.001	19797 0.04000	0.043		(a)

8	Aroclor-1260		CAS #: 11096-82-5			
7.970	7.968	0.002	12639 0.40000	0.41	80.00- 120.00	100.00(a)
8.454	8.450	0.004	12312 0.40000	0.42	80.01- 120.01	97.41
8.962	8.958	0.004	16326 0.40000	0.42	105.59- 145.59	129.17
Average of Peak Amounts =			0.41667			

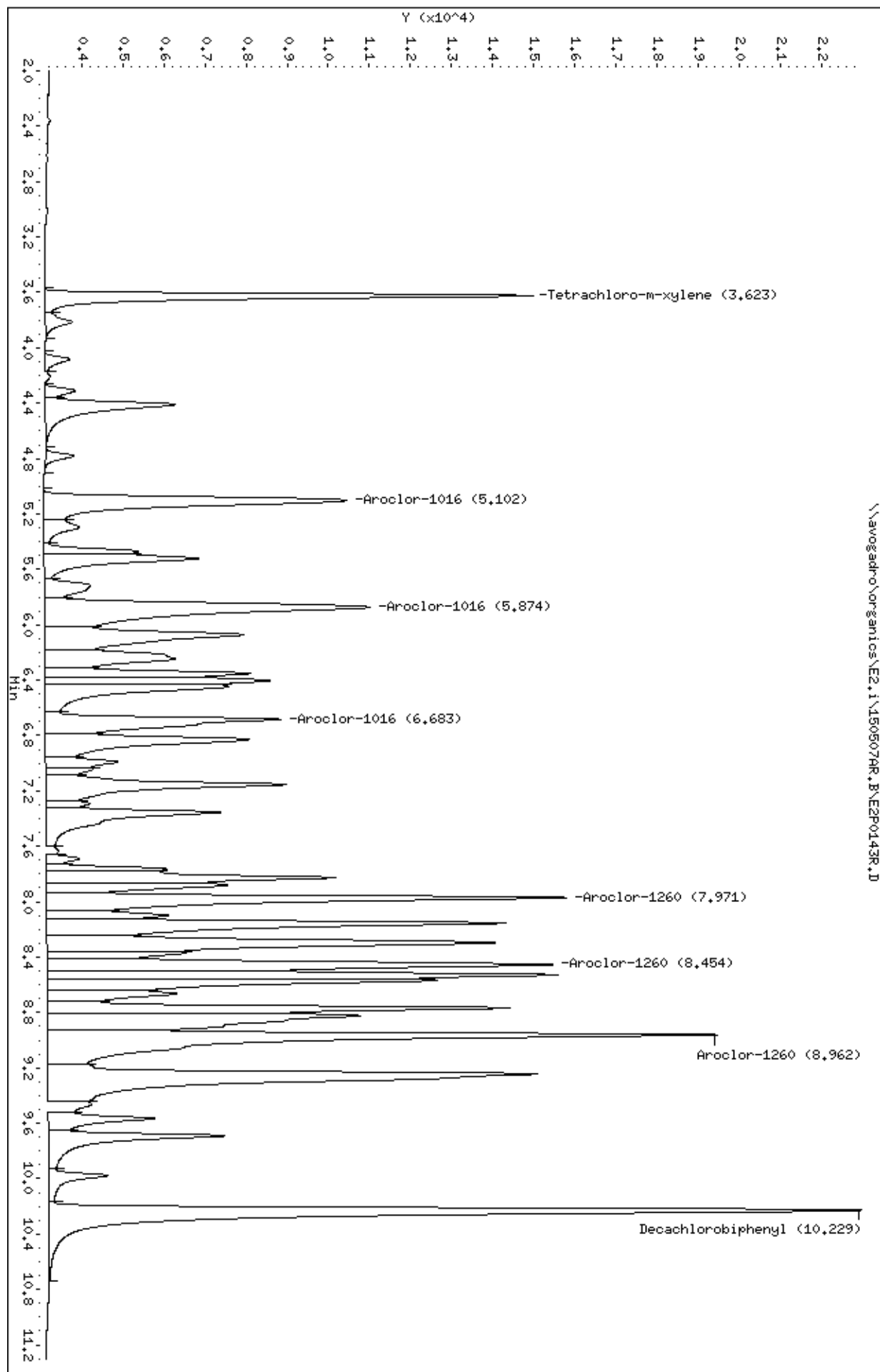
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0143R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\EP0143R.D
Date: 07-MAY-2015 20:29
Client ID: AR16603C2
Sample Info: AR16603C2,AR16603C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0144F.D
 Lab Smp Id: AR16604C2 Client Smp ID: AR16604C2
 Inj Date : 07-MAY-2015 20:44
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16604C2,AR16604C2,,ar1660.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144F.D
 Als bottle: 27 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.936	2.936	0.000	29735 0.04000	0.038	(a)		

5 Aroclor-1016				CAS #: 12674-11-2			
3.856	3.855	0.001	17618 0.80000	0.71	80.00-	120.00	100.00(a)
4.535	4.534	0.001	18464 0.80000	0.81	83.39-	123.39	104.80
5.552	5.551	0.001	7967 0.80000	0.82	23.00-	63.00	45.22
Average of Peak Amounts =				0.78000			

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.241	9.241	0.000	1735447 0.08000	0.074			

9 Aroclor-1260				CAS #: 11096-82-5			
7.291	7.289	0.002	34209 0.80000	0.75	80.00-	120.00	100.00(a)
7.565	7.562	0.003	29555 0.80000	0.77	66.20-	106.20	86.40
8.159	8.157	0.002	43471 0.80000	0.77	108.17-	148.17	127.07
Average of Peak Amounts =				0.76333			

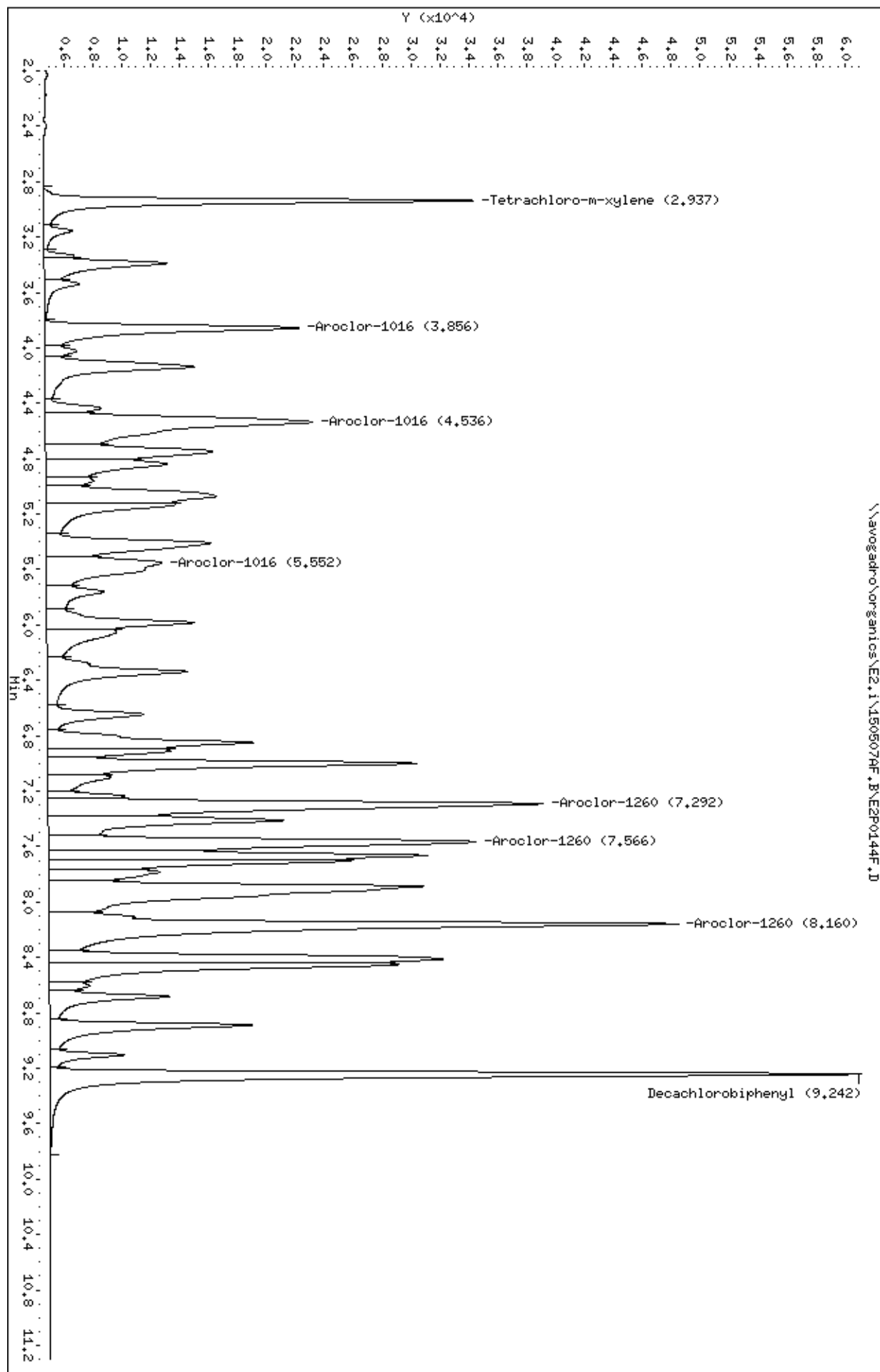
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0144F.D
Report Date: 11-May-2015 15:41

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0144F.D
Date : 07-MAY-2015 20:44
Client ID: AR16604C2
Sample Info: AR16604C2,AR16604C2,,ar1660,sub,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0144R.D
 Lab Smp Id: AR16604C2 Client Smp ID: AR16604C2
 Inj Date : 07-MAY-2015 20:44
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16604C2,AR16604C2,,ar1660.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:44 Cal File: E2P0144R.D
 Als bottle: 27 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
3.622	3.623	-0.001	23122	0.04000	0.041		(a)

6 Aroclor-1016				CAS #: 12674-11-2			
5.101	5.100	0.001	13384	0.80000	0.72	80.00- 120.00	100.00(a)
5.873	5.871	0.002	15969	0.80000	0.83	90.59- 130.59	119.31
6.682	6.681	0.001	10914	0.80000	0.79	58.70- 98.70	81.55
Average of Peak Amounts =					0.78000		

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
10.228	10.227	0.001	35003	0.08000	0.075		

8 Aroclor-1260				CAS #: 11096-82-5			
7.969	7.968	0.001	23482	0.80000	0.76	80.00- 120.00	100.00(a)
8.452	8.450	0.002	23441	0.80000	0.79	80.01- 120.01	99.83
8.960	8.958	0.002	30791	0.80000	0.79	105.59- 145.59	131.13
Average of Peak Amounts =					0.78000		

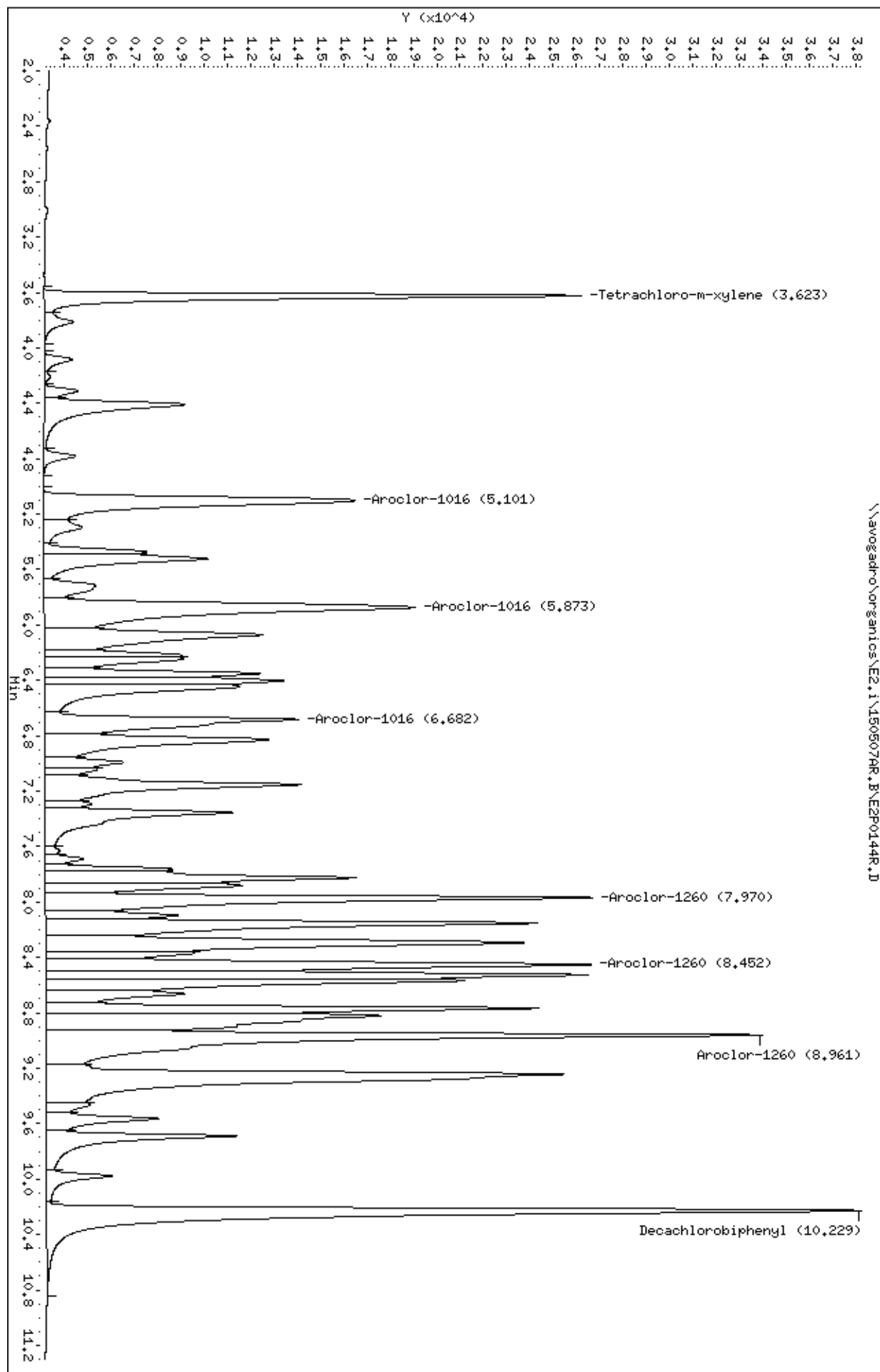
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0144R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\EP0144R.D
Date : 07-MAY-2015 20:44
Client ID: AR16604C2
Sample Info: AR16604C2,AR16604C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0145F.D
 Lab Smp Id: AR16605C2 Client Smp ID: AR16605C2
 Inj Date : 07-MAY-2015 20:58
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16605C2,AR16605C2,,ar1660.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 28 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			AMOUNTS				
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
2.936	2.936	0.000	56164	0.08000	0.073		

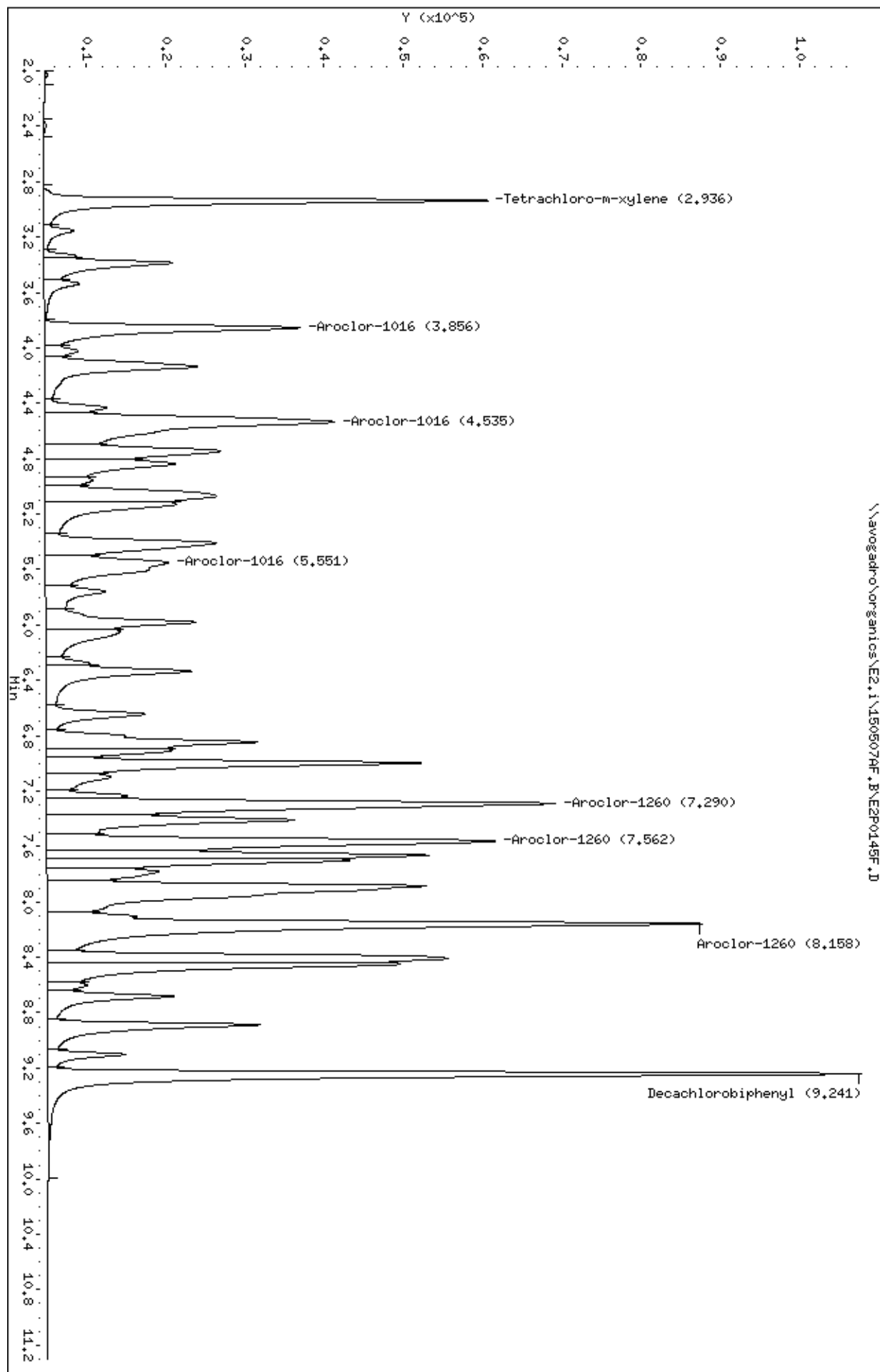
5 Aroclor-1016					CAS #: 12674-11-2		
3.855	3.855	0.000	32234	1.60000	1.3	80.00- 120.00	100.00
4.534	4.534	0.000	36521	1.60000	1.6	83.39- 123.39	113.30
5.551	5.551	0.000	15441	1.60000	1.6	23.00- 63.00	47.90
Average of Peak Amounts =					1.50000		

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
9.241	9.241	0.000	3219277	0.16000	0.14		

9 Aroclor-1260					CAS #: 11096-82-5		
7.289	7.289	0.000	64247	1.60000	1.4	80.00- 120.00	100.00
7.562	7.562	0.000	56612	1.60000	1.5	66.20- 106.20	88.12
8.157	8.157	0.000	82644	1.60000	1.5	108.17- 148.17	128.63
Average of Peak Amounts =					1.46667		

Data File: \\avogadro\organics\E2,i\150507AF.B\EP0145F.D
Date : 07-MAY-2015 20:58
Client ID: AR16605C2
Sample Info: AR16605C2,AR16605C2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0145R.D
 Lab Smp Id: AR16605C2 Client Smp ID: AR16605C2
 Inj Date : 07-MAY-2015 20:58
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16605C2,AR16605C2,,ar1660.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 28 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
3.622	3.623	-0.001	45852	0.08000	0.081		

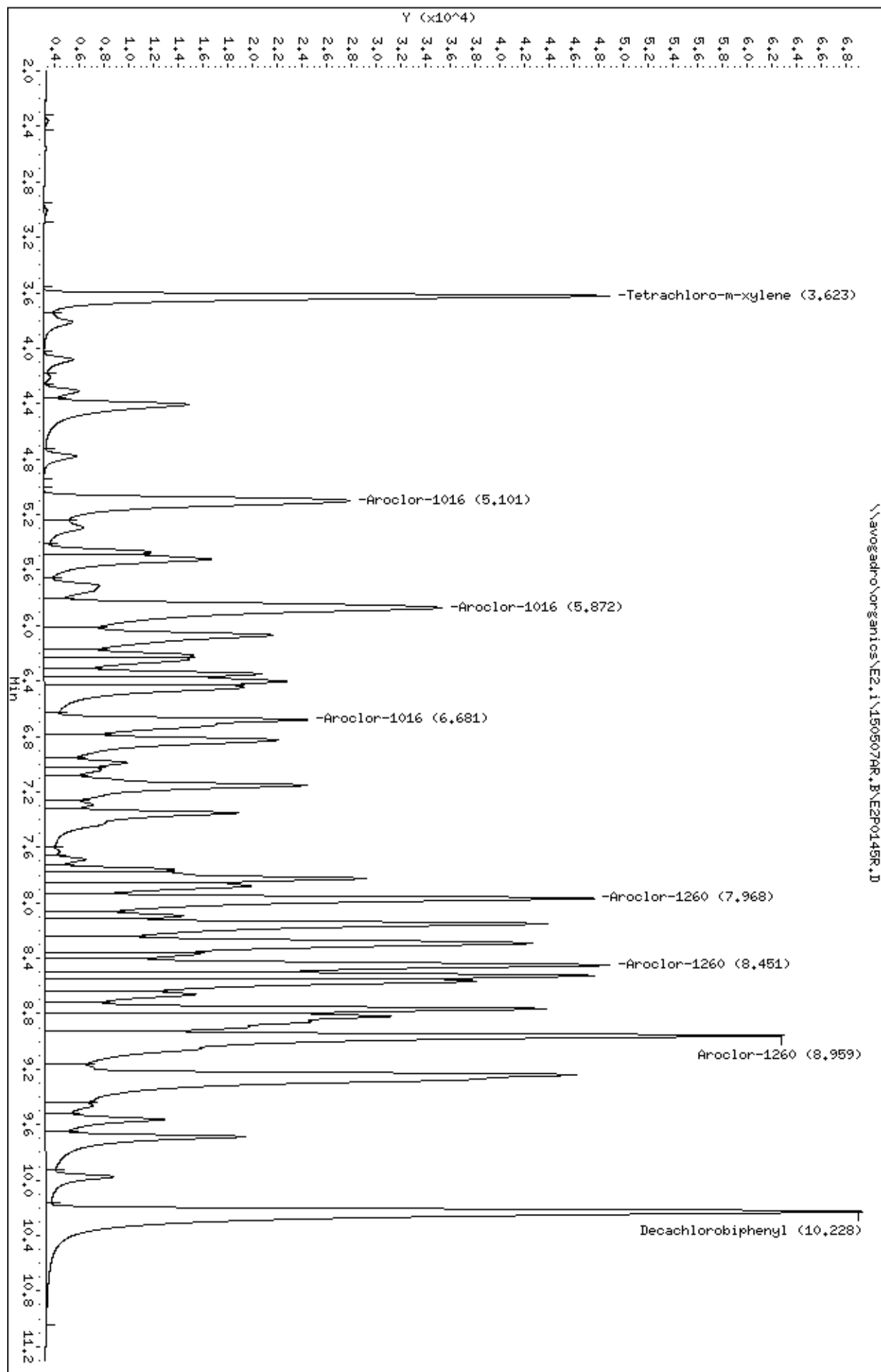
6 Aroclor-1016					CAS #: 12674-11-2		
5.100	5.100	0.000	24749	1.60000	1.3	80.00- 120.00	100.00
5.871	5.871	0.000	32186	1.60000	1.7	90.59- 130.59	130.05
6.681	6.681	0.000	21240	1.60000	1.5	58.70- 98.70	85.82
Average of Peak Amounts =					1.50000		

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
10.227	10.227	0.000	66085	0.16000	0.14		

8 Aroclor-1260					CAS #: 11096-82-5		
7.968	7.968	0.000	44484	1.60000	1.4	80.00- 120.00	100.00
8.450	8.450	0.000	45701	1.60000	1.5	80.01- 120.01	102.74
8.958	8.958	0.000	59783	1.60000	1.5	105.59- 145.59	134.39
Average of Peak Amounts =					1.46667		

Data File: \\avogadro\organics\E2,i\150507AR,B\EP0145R.D
 Date : 07-MAY-2015 20:58
 Client ID: AR16605C2
 Sample Info: AR16605C2,AR16605C2,,ar1660,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLP-PestII

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0174F.D
 Lab Smp Id: AIBLKCB Client Smp ID: AIBLKCB
 Inj Date : 08-MAY-2015 03:59
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AIBLKCB,AIBLKCB,,AIBLK.sub,,
 Misc Info : 3,,INSTBLANK,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 100 QC Sample: INSTBLANK
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: AIBLK.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

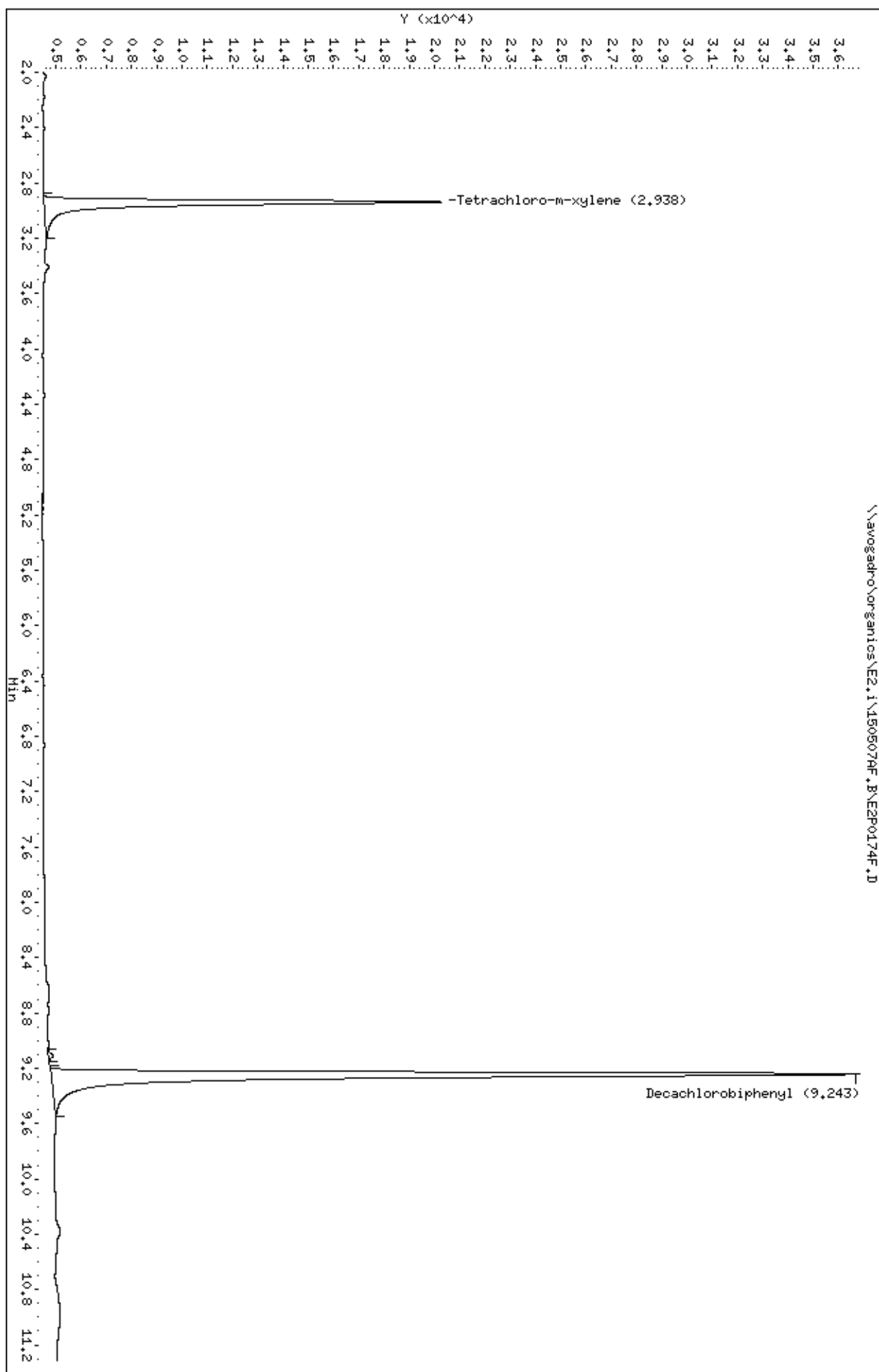
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	15756 0.02038	0.20		

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.242	9.241	0.001	980315 0.04163	0.42		

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0174F.D
Date : 08-MAY-2015 03:59
Client ID: AIBLKC
Sample Info: AIBLKC,AIBLKC,,AIBLK,sub,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0174R.D
 Lab Smp Id: AIBLKCB Client Smp ID: AIBLKCB
 Inj Date : 08-MAY-2015 03:59
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AIBLKCB,AIBLKCB,,AIBLK.sub,,
 Misc Info : 3,,INSTBLANK,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 100 QC Sample: INSTBLANK
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: AIBLK.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

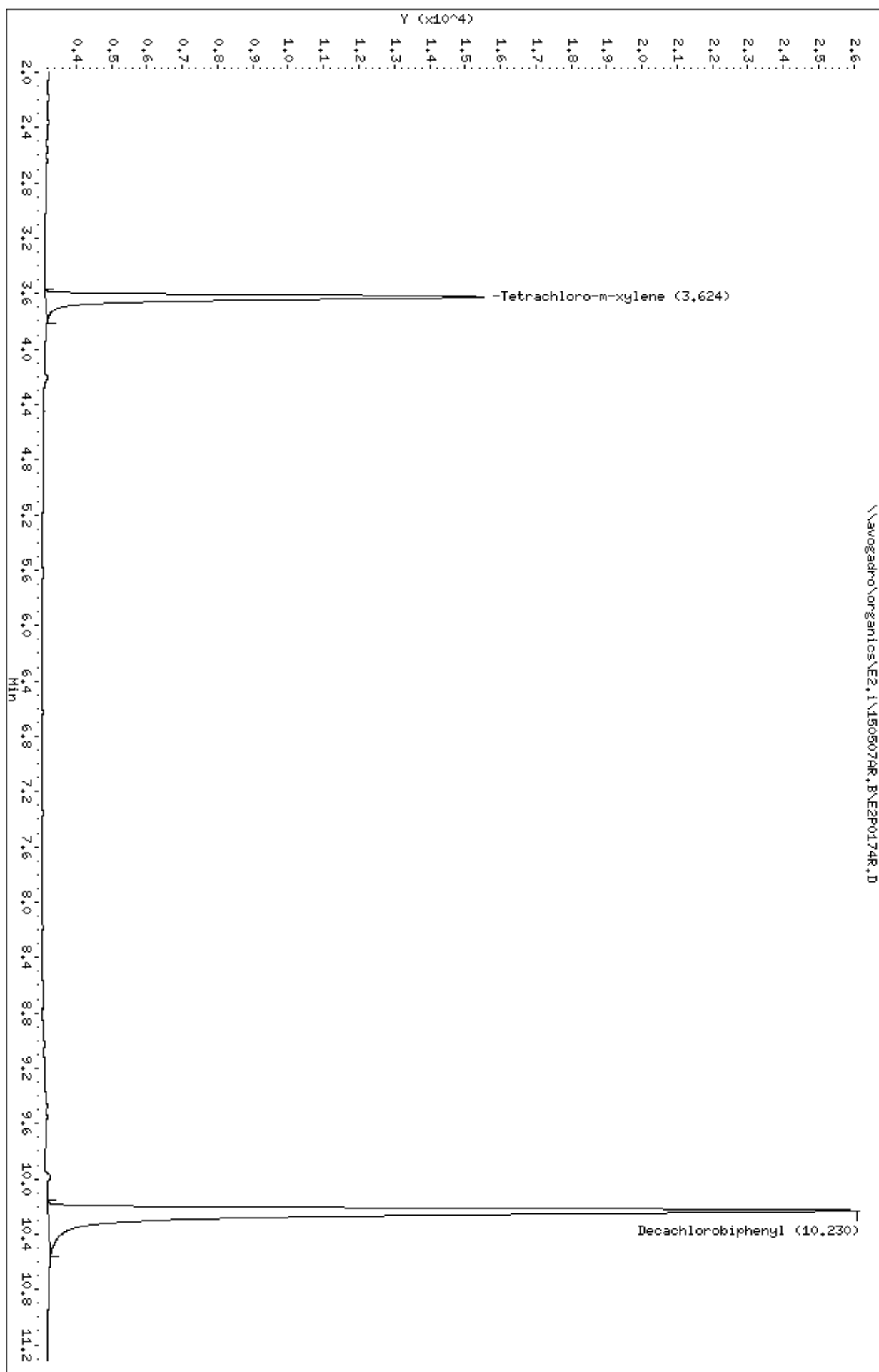
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	12434	0.02196	0.22	

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.230	10.227	0.003	22959	0.04853	0.48	

Data File: \\avogadro\organics\E2,i\150507HR,B\EP0174R.D
Date : 08-MAY-2015 03:59
Client ID: AIBLKCB
Sample Info: AIBLKCB,AIBLKCB,,AIBLK,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0175F.D
 Lab Smp Id: AR16603CB Client Smp ID: AR16603CB
 Inj Date : 08-MAY-2015 04:13
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603CB,AR16603CB,,ar1660.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 26 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.936	2.936	0.000	15982	0.02000	0.021			(a)

5 Aroclor-1016					CAS #: 12674-11-2			
3.856	3.855	0.001	9778	0.40000	0.39	80.00-	120.00	100.00(a)
4.536	4.534	0.002	10109	0.40000	0.44	83.39-	123.39	103.39
5.553	5.551	0.002	4205	0.40000	0.43	23.00-	63.00	43.00
Average of Peak Amounts =					0.42000			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.242	9.241	0.001	987829	0.04000	0.042			(a)

9 Aroclor-1260					CAS #: 11096-82-5			
7.294	7.289	0.005	19265	0.40000	0.42	80.00-	120.00	100.00(a)
7.567	7.562	0.005	16606	0.40000	0.44	66.20-	106.20	86.20
8.160	8.157	0.003	24691	0.40000	0.44	108.17-	148.17	128.17
Average of Peak Amounts =					0.43333			

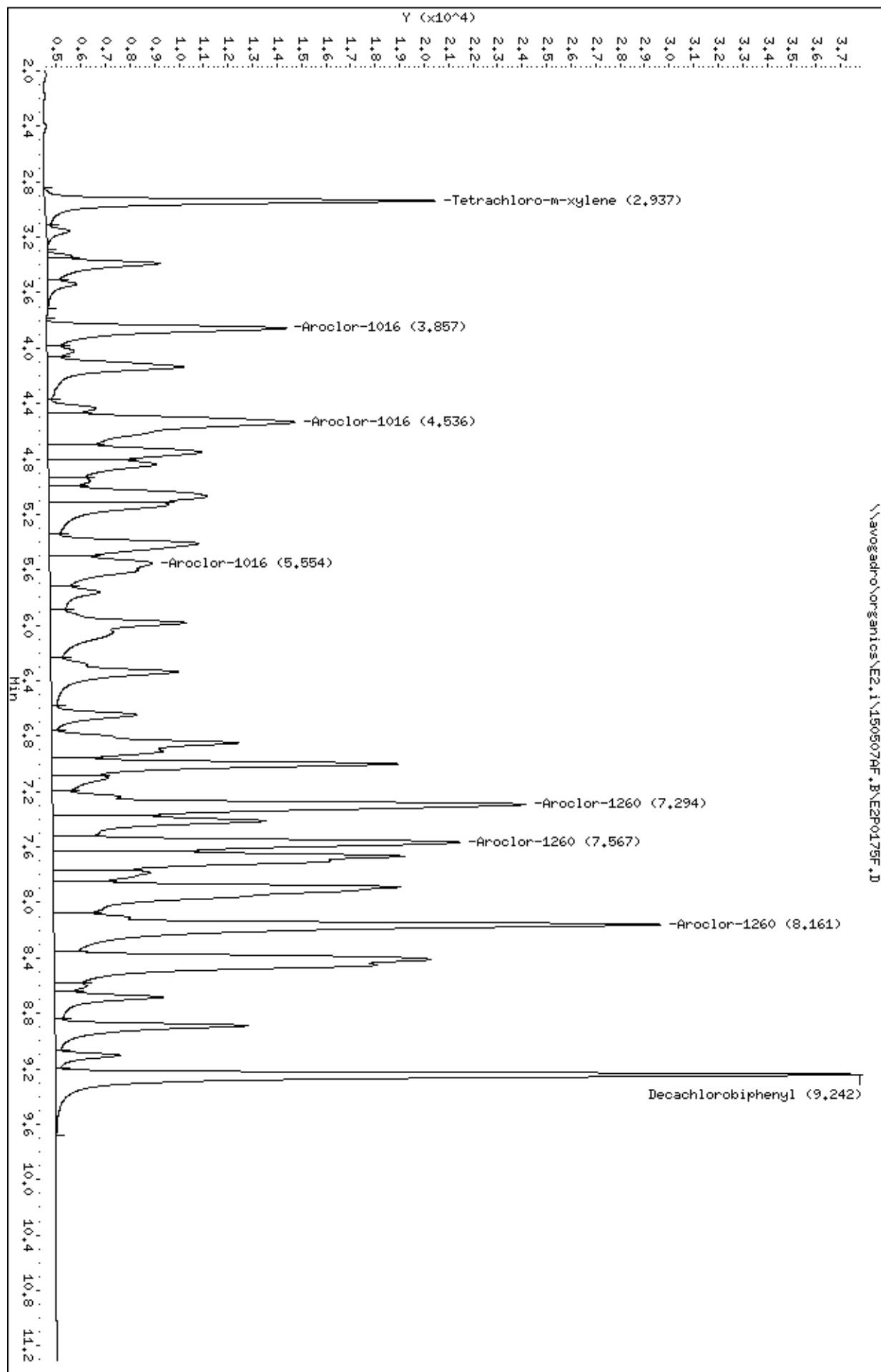
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0175F.D
Report Date: 11-May-2015 15:42

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0175F.D
Date: 08-MAY-2015 04:13
Client ID: AR16603CB
Sample Info: AR16603CB,AR16603CB,,ar1660,sdk,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0175R.D
 Lab Smp Id: AR16603CB Client Smp ID: AR16603CB
 Inj Date : 08-MAY-2015 04:13
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603CB,AR16603CB,,ar1660.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 26 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	12289	0.02000	0.022			(a)

6 Aroclor-1016					CAS #: 12674-11-2			
5.102	5.100	0.002	7604	0.40000	0.41	80.00-	120.00	100.00(a)
5.873	5.871	0.002	8409	0.40000	0.44	90.59-	130.59	110.59
6.683	6.681	0.002	5984	0.40000	0.43	58.70-	98.70	78.70
Average of Peak Amounts =					0.42667			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.229	10.227	0.002	23059	0.04000	0.049			(a)

8 Aroclor-1260					CAS #: 11096-82-5			
7.970	7.968	0.002	13307	0.40000	0.43	80.00-	120.00	100.00(a)
8.453	8.450	0.003	13308	0.40000	0.45	80.01-	120.01	100.01
8.962	8.958	0.004	16712	0.40000	0.43	105.59-	145.59	125.59
Average of Peak Amounts =					0.43667			

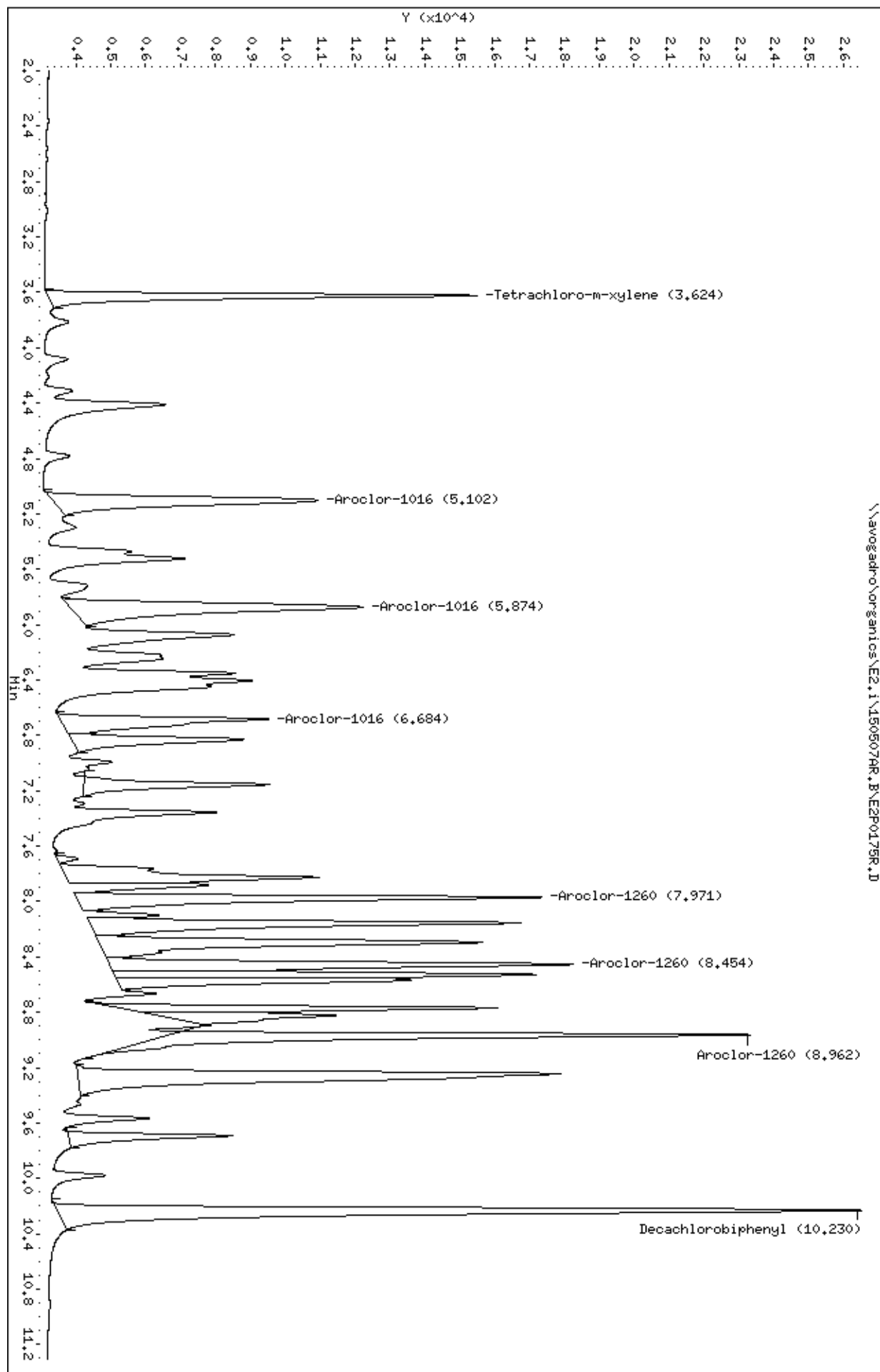
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0175R.D
Report Date: 11-May-2015 15:44

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0175R.D
Date : 08-MAY-2015 04:13
Client ID: AR16603CB
Sample Info: AR16603CB,AR16603CB,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0393F.D
 Lab Smp Id: AR12213E2 Client Smp ID: AR12213E2
 Inj Date : 12-MAY-2015 17:42
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12213E2,AR12213E2,,ar1221.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
 Als bottle: 1 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1221.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE (	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
2.939	2.938	0.001	15161	0.02000	0.021		(a)

3 Aroclor-1221					CAS #: 11104-28-2		
2.394	2.394	0.000	3008	0.40000	0.40	80.00- 120.00	100.00(a)
3.157	3.157	0.000	2920	0.40000	0.40	77.07- 117.07	97.07
3.390	3.390	0.000	6585	0.40000	0.40	198.92- 238.92	218.92
Average of Peak Amounts =					0.40000		

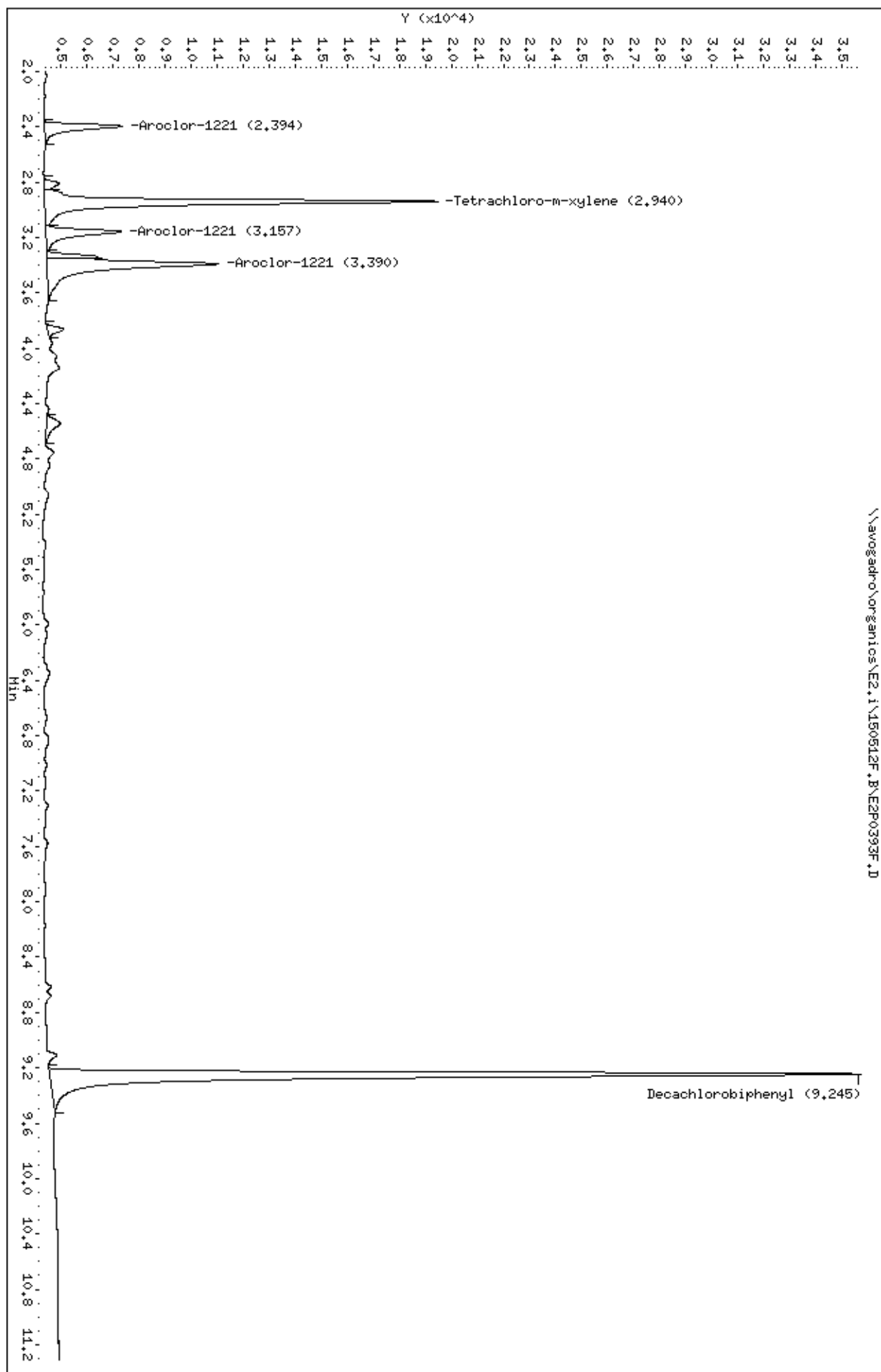
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3		
9.245	9.242	0.003	942972	0.04000	0.041		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0393F.D
Date : 12-May-2015 17:42
Client ID: AR12213EE2
Sample Info: AR12213EE2,AR12213EE2,,ar1221.sub,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0393R.D
Lab Smp Id: AR12213E2 Client Smp ID: AR12213E2
Inj Date : 12-MAY-2015 17:42
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12213E2,AR12213E2,,ar1221.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1221.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.624	3.623	0.001	12220 0.02000	0.020		(a)

2 Aroclor-1221 CAS #: 11104-28-2						
3.004	3.005	-0.001	2729 0.40000	0.40	80.00- 120.00	100.00(a)
4.083	4.083	0.000	2327 0.40000	0.40	65.27- 105.27	85.27
4.410	4.411	-0.001	5239 0.40000	0.40	171.98- 211.98	191.98
Average of Peak Amounts =			0.40000			

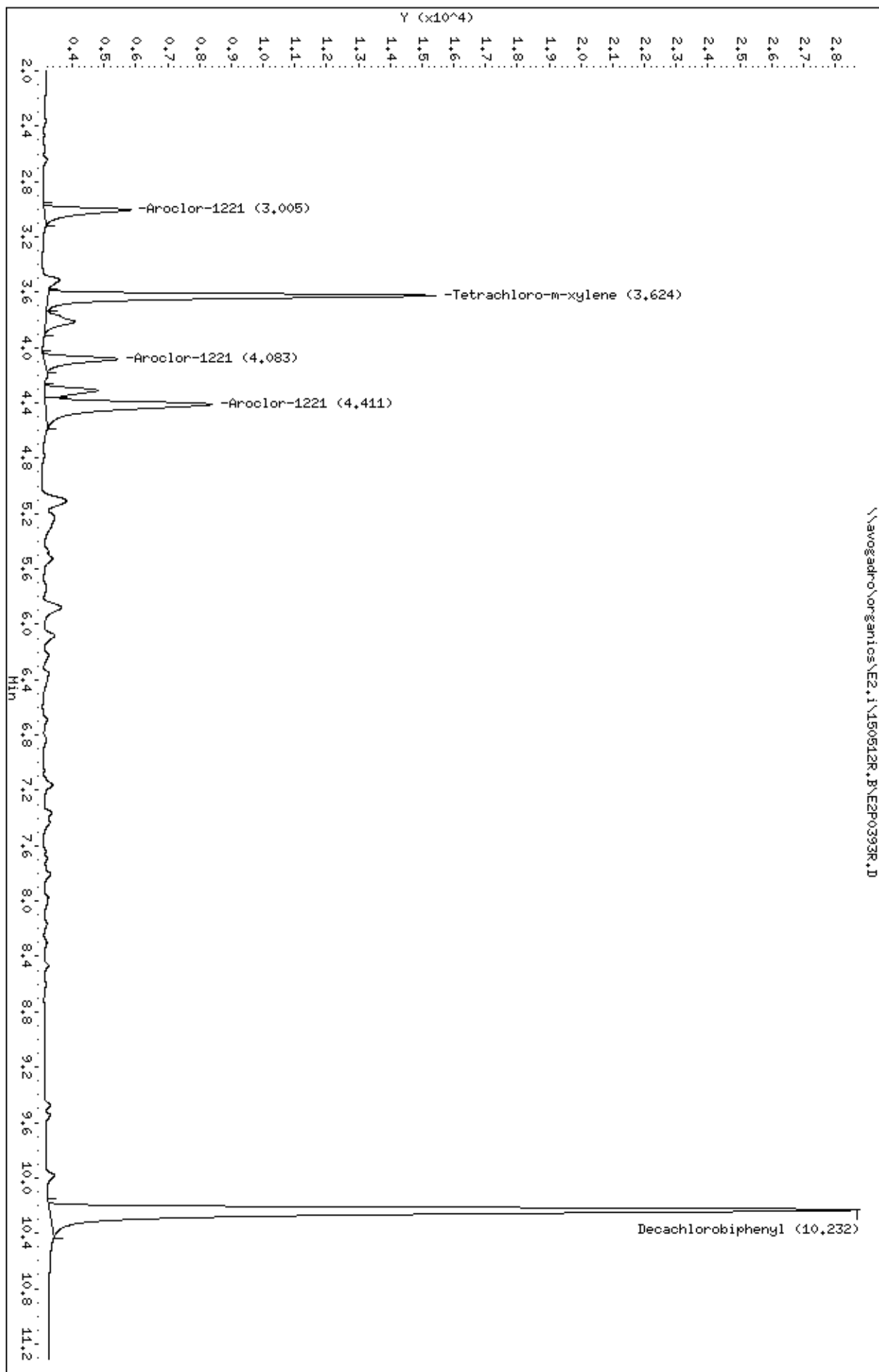
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.231	10.229	0.002	25496 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0393R.D
Date: 12-May-2015 17:42
Client ID: AR12213E2
Sample Info: AR12213E2,AR12213E2,,ar1221,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0394F.D
 Lab Smp Id: AR12323E2 Client Smp ID: AR12323E2
 Inj Date : 12-MAY-2015 17:57
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12323E2,AR12323E2,,ar1232.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
 Als bottle: 2 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1232.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.939	2.938	0.001	15018 0.02000	0.021		(a)

4	Aroclor-1232		CAS #: 11141-16-5			
3.158	3.158	0.000	2050 0.40000	0.40	80.00- 120.00	100.00(a)
3.861	3.861	0.000	4397 0.40000	0.40	194.49- 234.49	214.49
4.141	4.141	0.000	2431 0.40000	0.40	98.59- 138.59	118.59
Average of Peak Amounts =			0.40000			

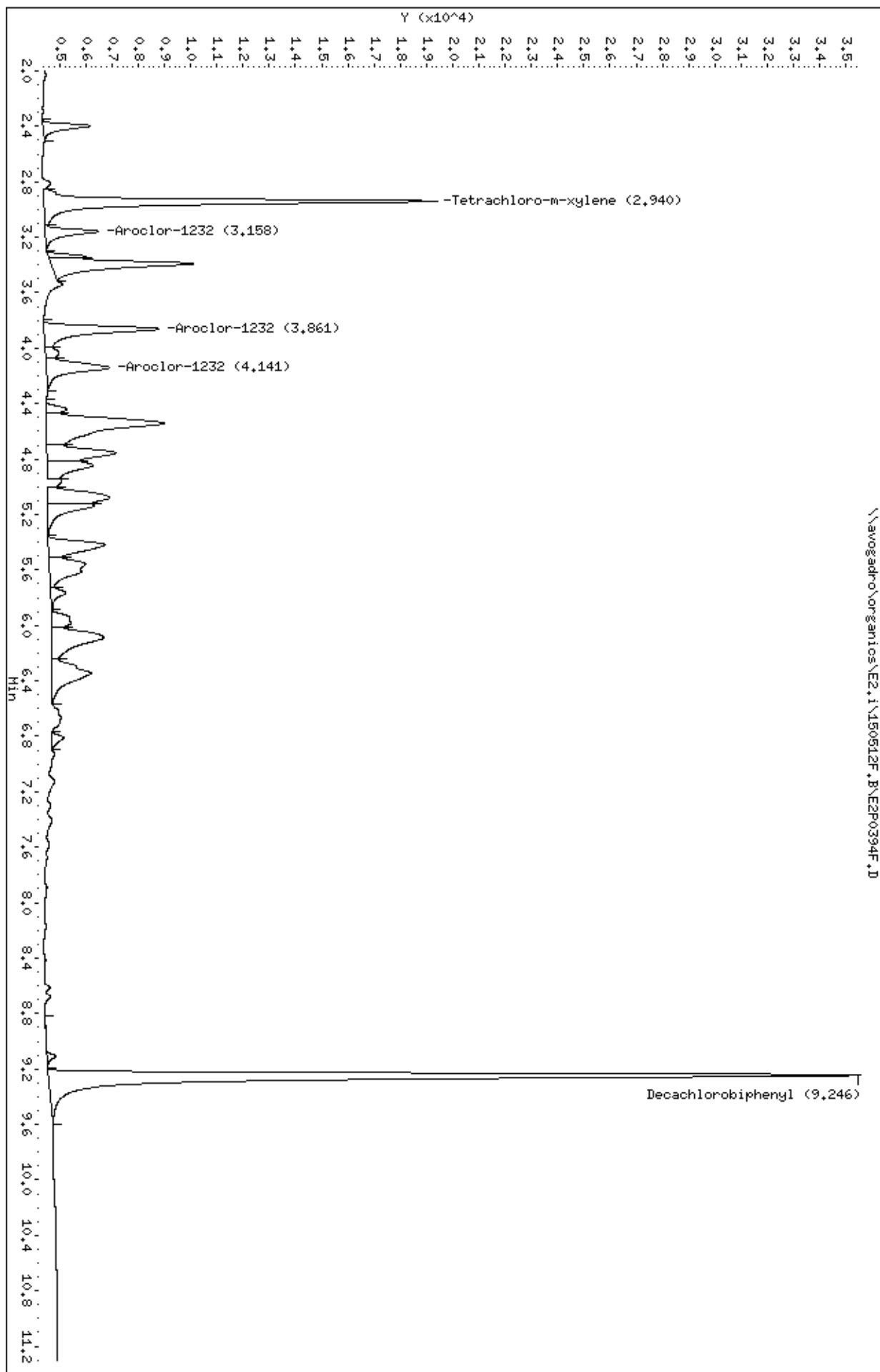
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.245	9.242	0.003	949651 0.04000	0.042		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0394F.D
Date: 12-May-2015 17:57
Client ID: AR12323E2
Sample Info: AR12323E2,AR12323E2,,ar1232,sub,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0394R.D
 Lab Smp Id: AR12323E2 Client Smp ID: AR12323E2
 Inj Date : 12-MAY-2015 17:57
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12323E2,AR12323E2,,ar1232.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
 Als bottle: 2 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1232.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.624	3.623	0.001	12255 0.02000	0.020		(a)

3	Aroclor-1232		CAS #: 11141-16-5			
4.311	4.311	0.000	1308 0.40000	0.40	80.00- 120.00	100.00(a)
5.105	5.105	0.000	3739 0.40000	0.40	265.86- 305.86	285.86
5.525	5.525	0.000	1806 0.40000	0.40	118.07- 158.07	138.07
Average of Peak Amounts =			0.40000			

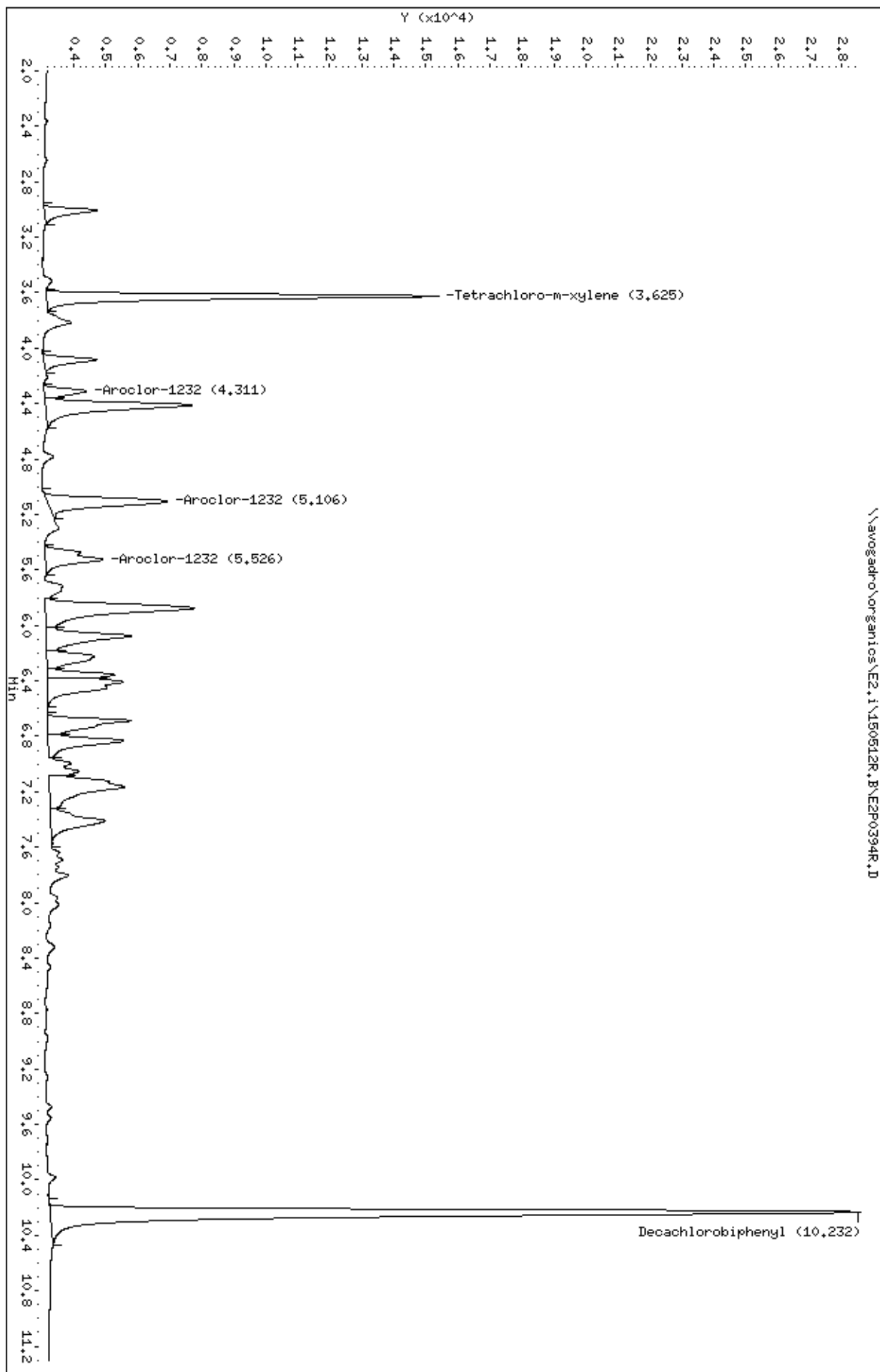
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.232	10.229	0.003	25354 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0394R.D
Date: 12-May-2015 17:57
Client ID: AR12323E2
Sample Info: AR12323E2,AR12323E2,,ar1232,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0395F.D
 Lab Smp Id: AR12421E2 Client Smp ID: AR12421E2
 Inj Date : 12-MAY-2015 18:11
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12421E2,AR12421E2,,ar1242.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415F.D
 Als bottle: 3 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.940	2.938	0.002	3728 0.00500	0.0051			(a)

6 Aroclor-1242				CAS #: 53469-21-9			
4.843	4.840	0.003	833 0.10000	0.10	80.00- 120.00	100.00	(a)
5.556	5.552	0.004	712 0.10000	0.10	77.72- 117.72	85.47	
6.084	6.078	0.006	1050 0.10000	0.096	150.92- 190.92	126.05	
Average of Peak Amounts =				0.09867			

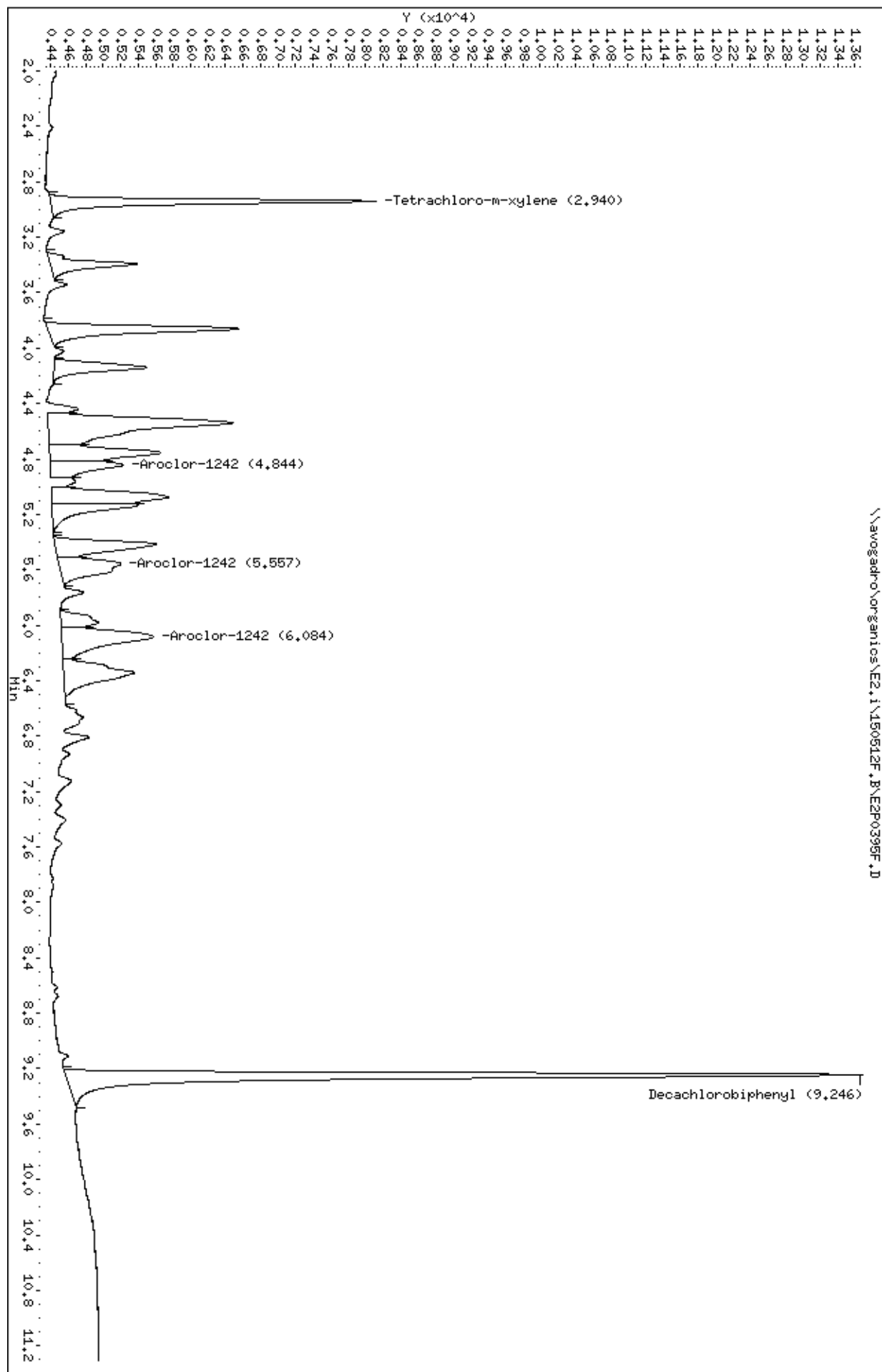
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.246	9.242	0.004	272586 0.01000	0.012			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0395F.D
 Date : 12-May-2015 18:11
 Client ID: AR12421E2
 Sample Info: AR12421E2,AR12421E2,,ar1242,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0395R.D
 Lab Smp Id: AR12421E2 Client Smp ID: AR12421E2
 Inj Date : 12-MAY-2015 18:11
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12421E2,AR12421E2,,ar1242.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415R.D
 Als bottle: 3 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.625	3.623	0.002	2786 0.00500	0.0046		(a)

4 Aroclor-1242 CAS #: 53469-21-9						
5.876	5.872	0.004	2076 0.10000	0.093	80.00- 120.00	100.00(a)
6.077	6.073	0.004	1207 0.10000	0.10	31.47- 71.47	58.14
6.407	6.404	0.003	1273 0.10000	0.11	28.03- 68.03	61.32
Average of Peak Amounts =			0.10100			

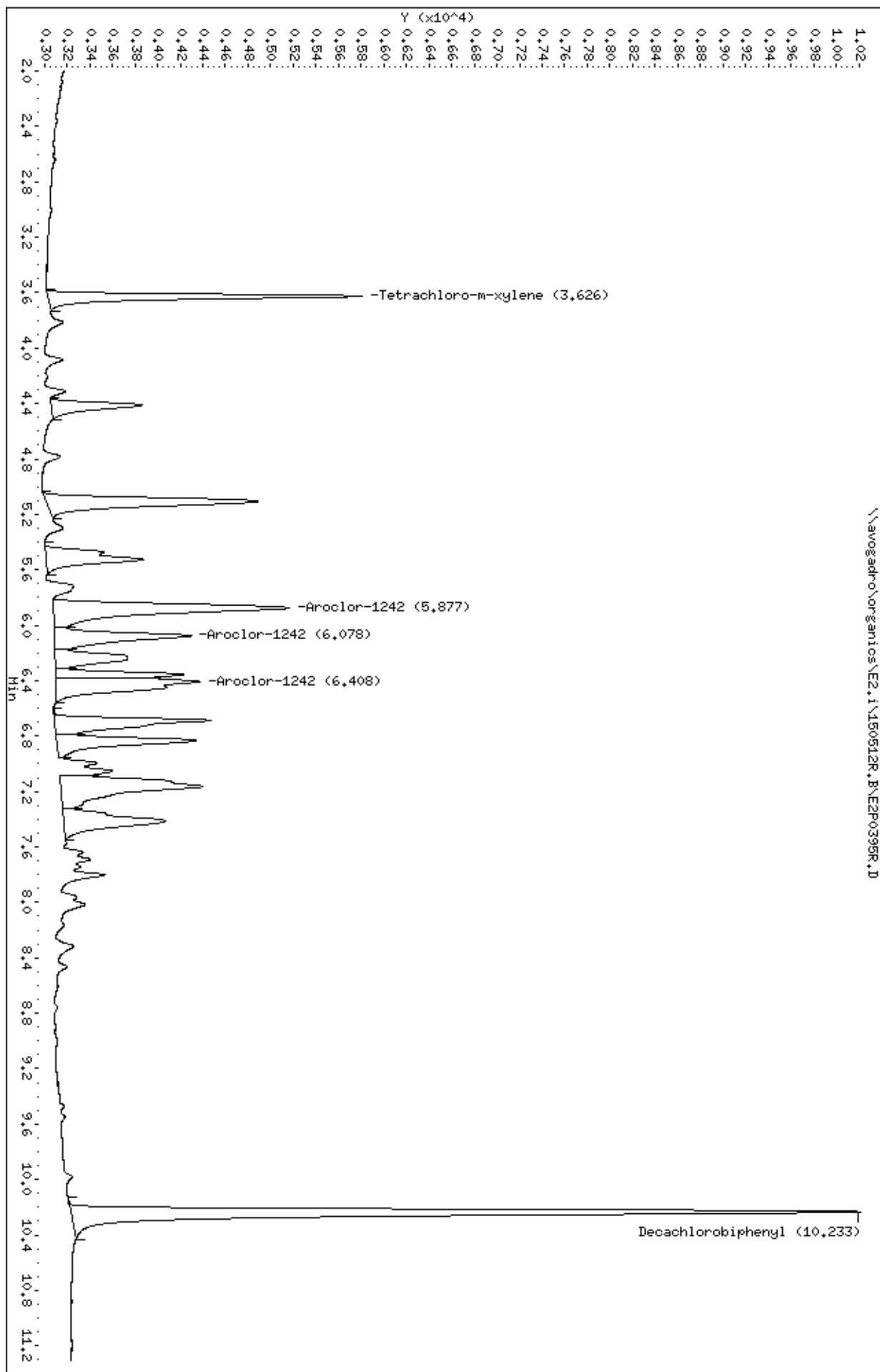
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.232	10.229	0.003	6986 0.01000	0.011		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0395R.D
Date : 12-May-2015 18:11
Client ID: AR12421E2
Sample Info: AR12421E2,AR12421E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0396F.D
 Lab Smp Id: AR12426E2 Client Smp ID: AR12426E2
 Inj Date : 12-MAY-2015 18:26
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12426E2,AR12426E2,,ar1242.sub,,
 Misc Info : 1,6,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:19 Cal File: E2P0416F.D
 Als bottle: 4 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.940	2.938	0.002	1864 0.00000	0.0026			(a)

6 Aroclor-1242				CAS #: 53469-21-9			
4.844	4.840	0.004	413 0.05000	0.050	80.00- 120.00	100.00	(a)
5.558	5.552	0.006	351 0.05000	0.050	77.72- 117.72	84.99	
6.086	6.078	0.008	503 0.05000	0.047	150.92- 190.92	121.79	
Average of Peak Amounts =				0.04900			

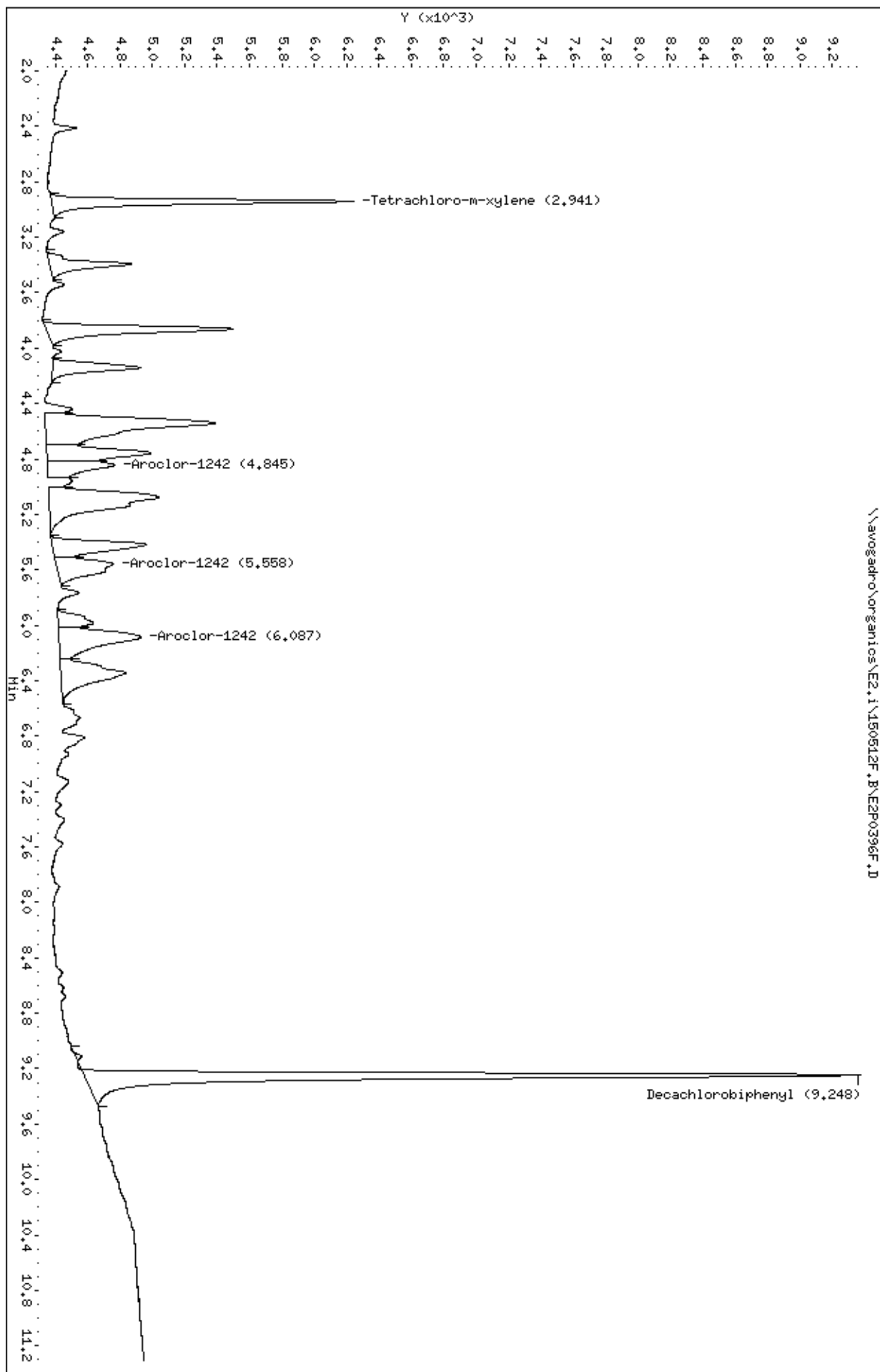
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.247	9.242	0.005	143509 0.00000	0.0062			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0396F.D
Date: 12-May-2015 18:26
Client ID: AR12426E2
Sample Info: AR12426E2,AR12426E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0396R.D
 Lab Smp Id: AR12426E2 Client Smp ID: AR12426E2
 Inj Date : 12-MAY-2015 18:26
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12426E2,AR12426E2,,ar1242.sub,,
 Misc Info : 1,6,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 18:26 Cal File: E2P0396R.D
 Als bottle: 4 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	1341 0.00000	0.0022		(a)

4	Aroclor-1242		CAS #: 53469-21-9			
5.877	5.872	0.005	991 0.05000	0.046	80.00- 120.00	100.00(a)
6.078	6.073	0.005	534 0.05000	0.046	31.47- 71.47	53.88
6.408	6.404	0.004	612 0.05000	0.052	28.03- 68.03	61.76
Average of Peak Amounts =			0.04800			

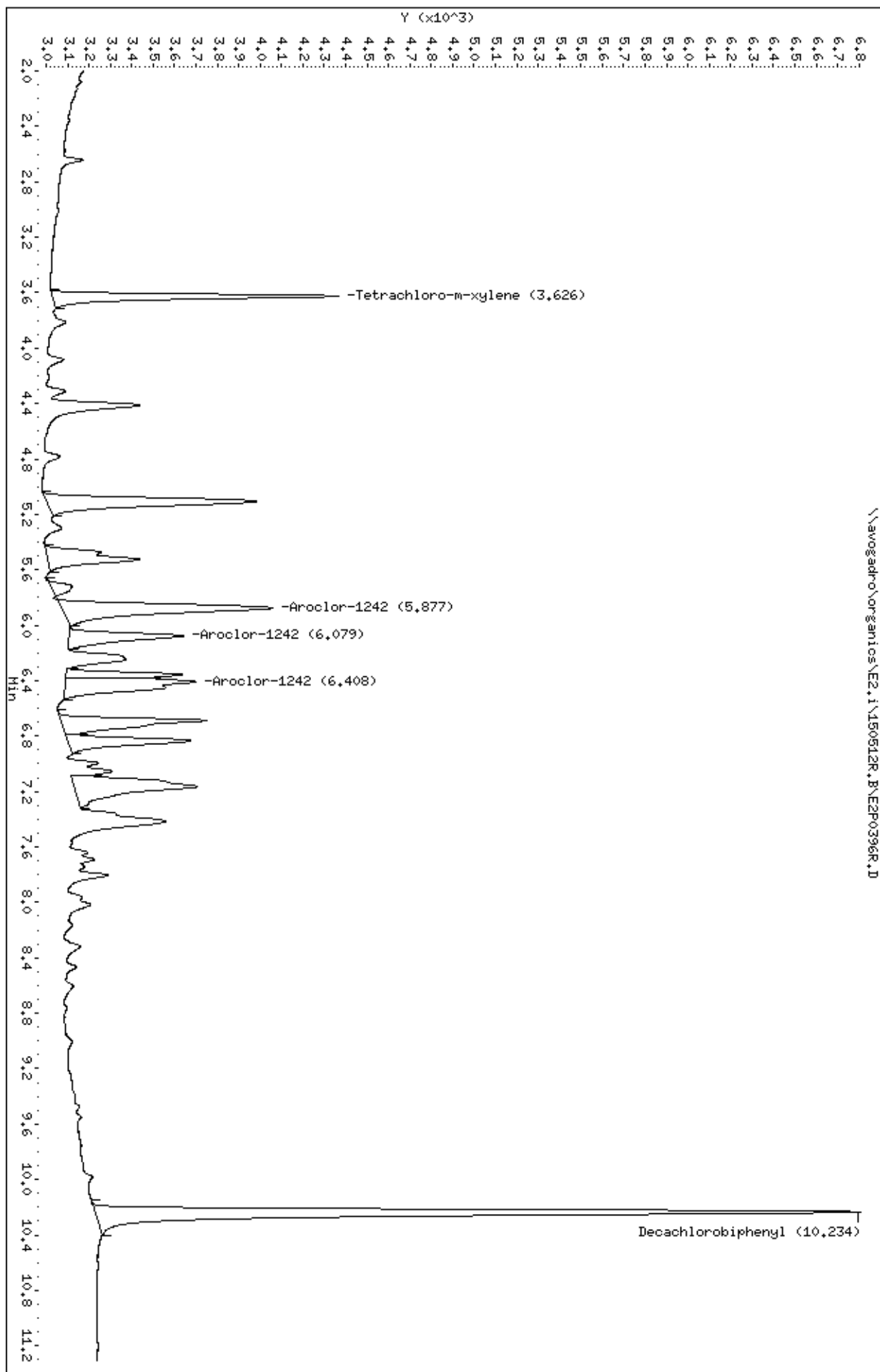
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.234	10.229	0.005	3580 0.00000	0.0057		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.i\150512R.B\E2P0396R.D
 Date : 12-May-2015 18:26
 Client ID: AR12426E2
 Sample Info: AR12426E2,AR12426E2,,ar1242,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0397F.D
 Lab Smp Id: AR12422E2 Client Smp ID: AR12422E2
 Inj Date : 12-MAY-2015 18:41
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12422E2,AR12422E2,,ar1242.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417F.D
 Als bottle: 5 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.939	2.938	0.001	7453 0.01000	0.010			(a)

6 Aroclor-1242				CAS #: 53469-21-9			
4.843	4.840	0.003	1676 0.20000	0.20	80.00- 120.00	100.00	(a)
5.557	5.552	0.005	1542 0.20000	0.22	77.72- 117.72	92.00	
6.084	6.078	0.006	2250 0.20000	0.21	150.92- 190.92	134.25	
Average of Peak Amounts =				0.21000			

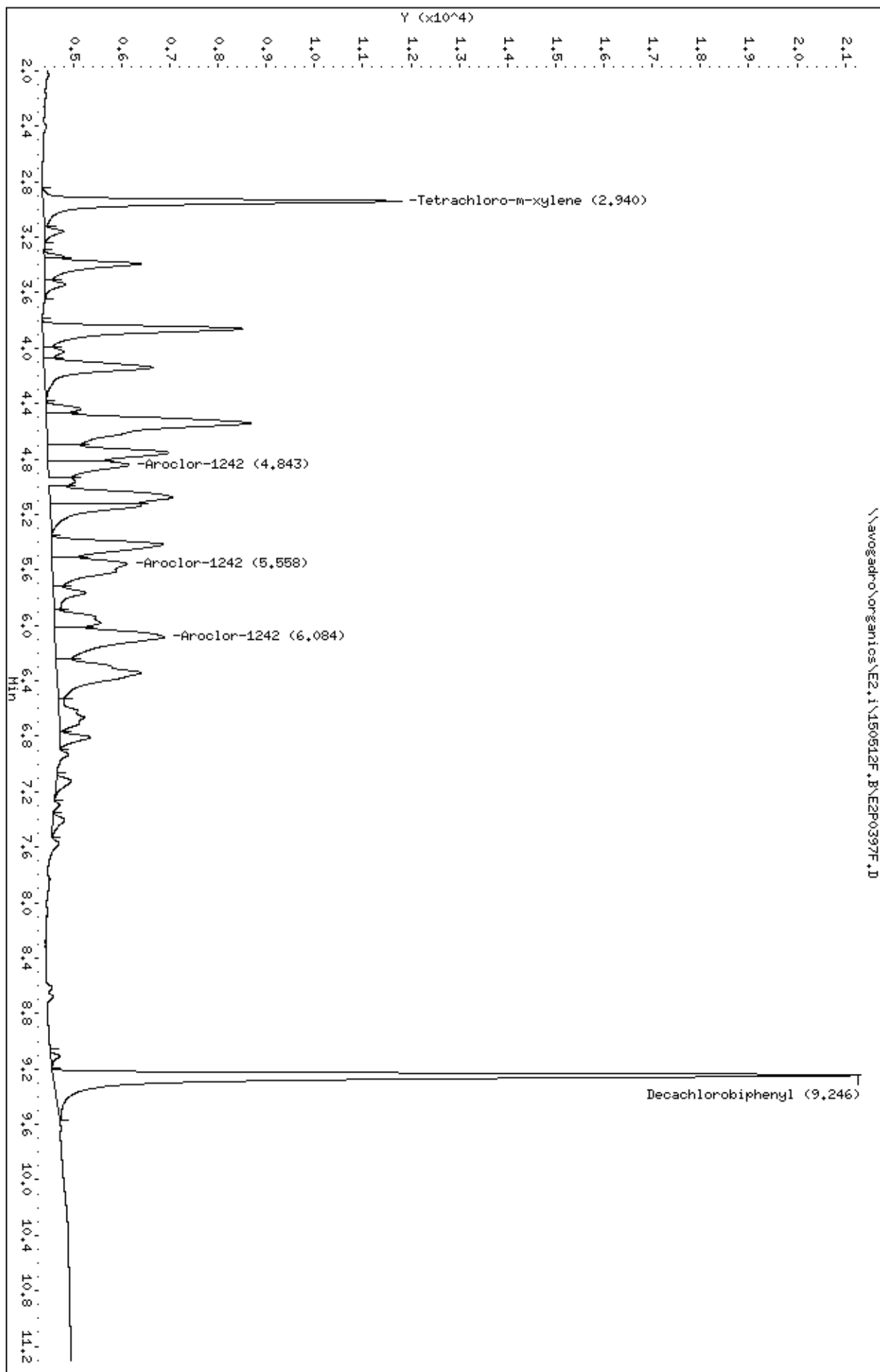
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.246	9.242	0.004	507154 0.02000	0.022			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0397F.D
Date: 12-May-2015 18:41
Client ID: AR12422E2
Sample Info: AR12422E2,AR12422E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0397R.D
 Lab Smp Id: AR12422E2 Client Smp ID: AR12422E2
 Inj Date : 12-MAY-2015 18:41
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12422E2,AR12422E2,,ar1242.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417R.D
 Als bottle: 5 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.626	3.623	0.003	5781	0.01000	0.0097			(a)

4 Aroclor-1242					CAS #: 53469-21-9			
5.876	5.872	0.004	4373	0.20000	0.20	80.00-	120.00	100.00(a)
6.077	6.073	0.004	2510	0.20000	0.21	31.47-	71.47	57.40
6.407	6.404	0.003	2543	0.20000	0.21	28.03-	68.03	58.15
Average of Peak Amounts =					0.20667			

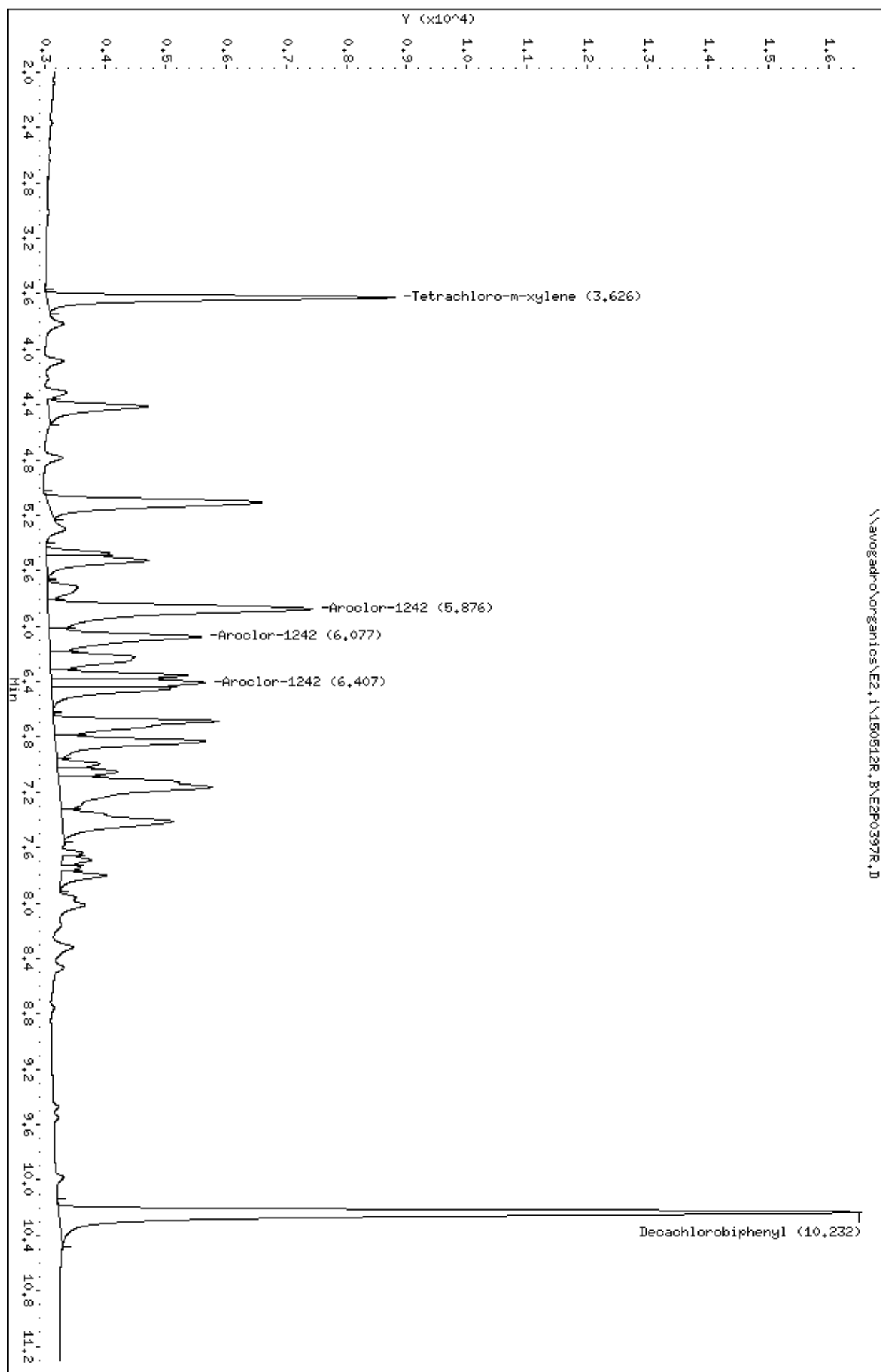
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.232	10.229	0.003	13309	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0397R.D
Date : 12-May-2015 18:41
Client ID: AR12422E2
Sample Info: AR12422E2,AR12422E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0398F.D
Lab Smp Id: AR12423E2 Client Smp ID: AR12423E2
Inj Date : 12-MAY-2015 18:55
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12423E2,AR12423E2,,ar1242.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.939	2.938	0.001	15497 0.02000	0.021		(a)

6 Aroclor-1242 CAS #: 53469-21-9						
4.842	4.840	0.002	3424 0.40000	0.41	80.00- 120.00	100.00(a)
5.555	5.552	0.003	3132 0.40000	0.43	77.72- 117.72	91.47
6.081	6.078	0.003	4746 0.40000	0.43	150.92- 190.92	138.61
Average of Peak Amounts =			0.42333			

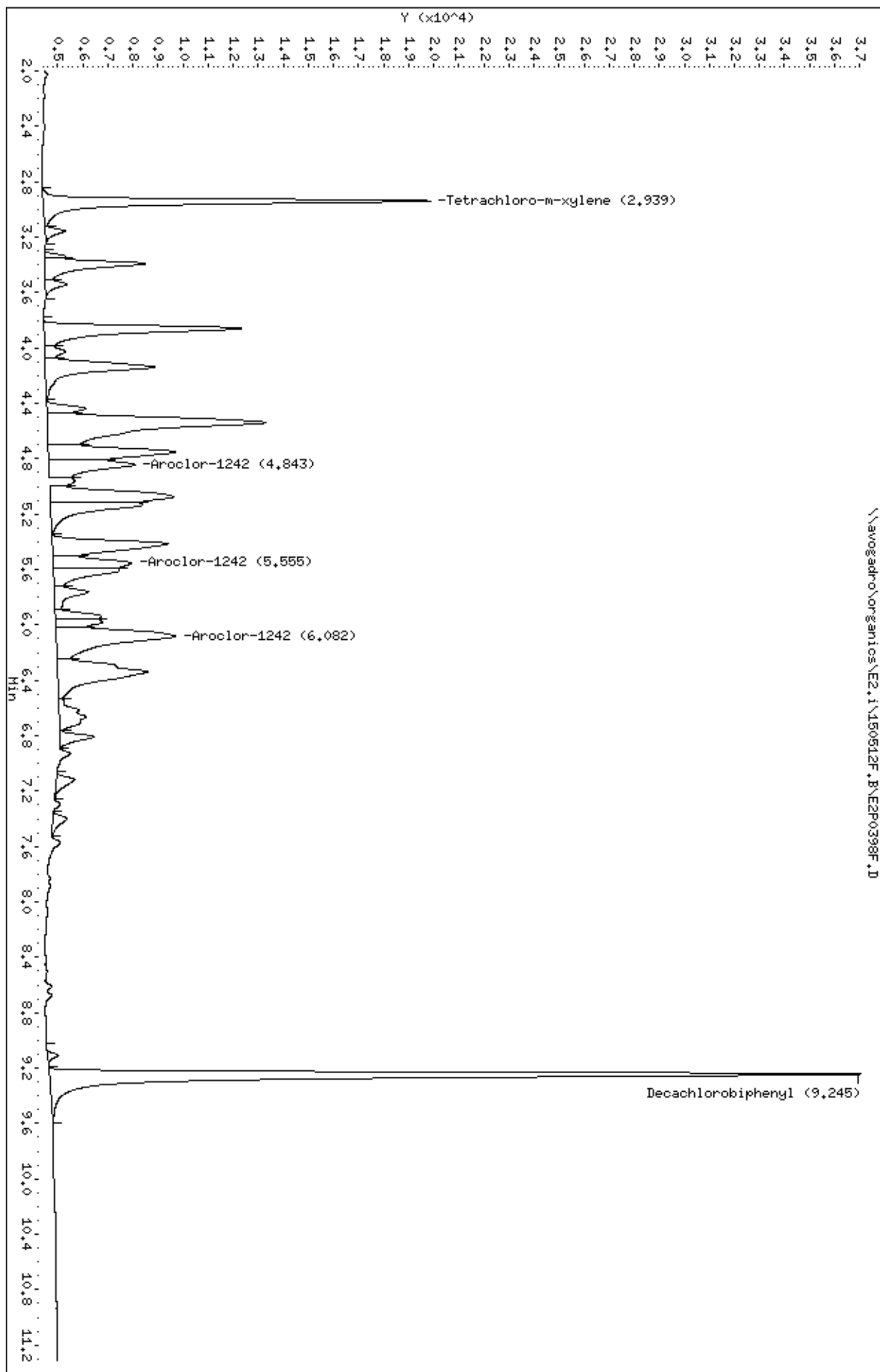
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.244	9.242	0.002	973152 0.04000	0.042		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0398F.D
Date: 12-May-2015 18:55
Client ID: AR12423E2
Sample Info: AR12423E2,AR12423E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0398R.D
 Lab Smp Id: AR12423E2 Client Smp ID: AR12423E2
 Inj Date : 12-MAY-2015 18:55
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12423E2,AR12423E2,,ar1242.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
 Als bottle: 6 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.624	3.623	0.001	12878	0.02000	0.021			(a)

4 Aroclor-1242					CAS #: 53469-21-9			
5.874	5.872	0.002	9407	0.40000	0.43	80.00-	120.00	100.00(a)
6.075	6.073	0.002	5230	0.40000	0.43	31.47-	71.47	55.60
6.406	6.404	0.002	5126	0.40000	0.42	28.03-	68.03	54.49
Average of Peak Amounts =					0.42667			

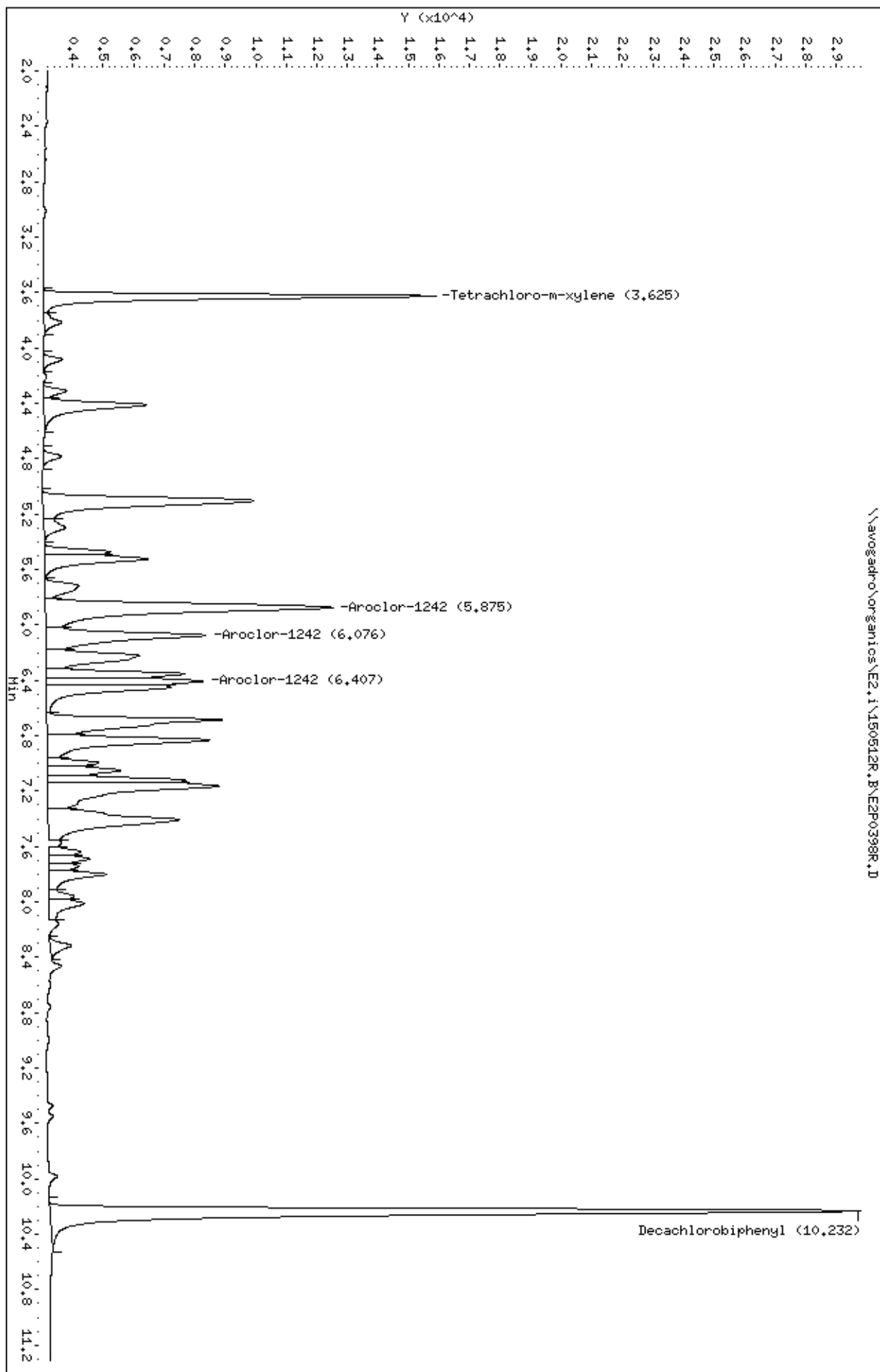
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.231	10.229	0.002	26555	0.04000	0.042			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0398R.D
Date: 12-May-2015 18:55
Client ID: AR12423E2
Sample Info: AR12423E2,AR12423E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0399F.D
 Lab Smp Id: AR12424E2 Client Smp ID: AR12424E2
 Inj Date : 12-MAY-2015 19:09
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12424E2,AR12424E2,,ar1242.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419F.D
 Als bottle: 7 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.939	2.938	0.001	28630 0.04000	0.039		(a)

6 Aroclor-1242 CAS #: 53469-21-9						
4.842	4.840	0.002	6729 0.80000	0.81	80.00- 120.00	100.00(a)
5.554	5.552	0.002	6124 0.80000	0.83	77.72- 117.72	91.01
6.080	6.078	0.002	9579 0.80000	0.86	150.92- 190.92	142.35
Average of Peak Amounts =			0.83333			

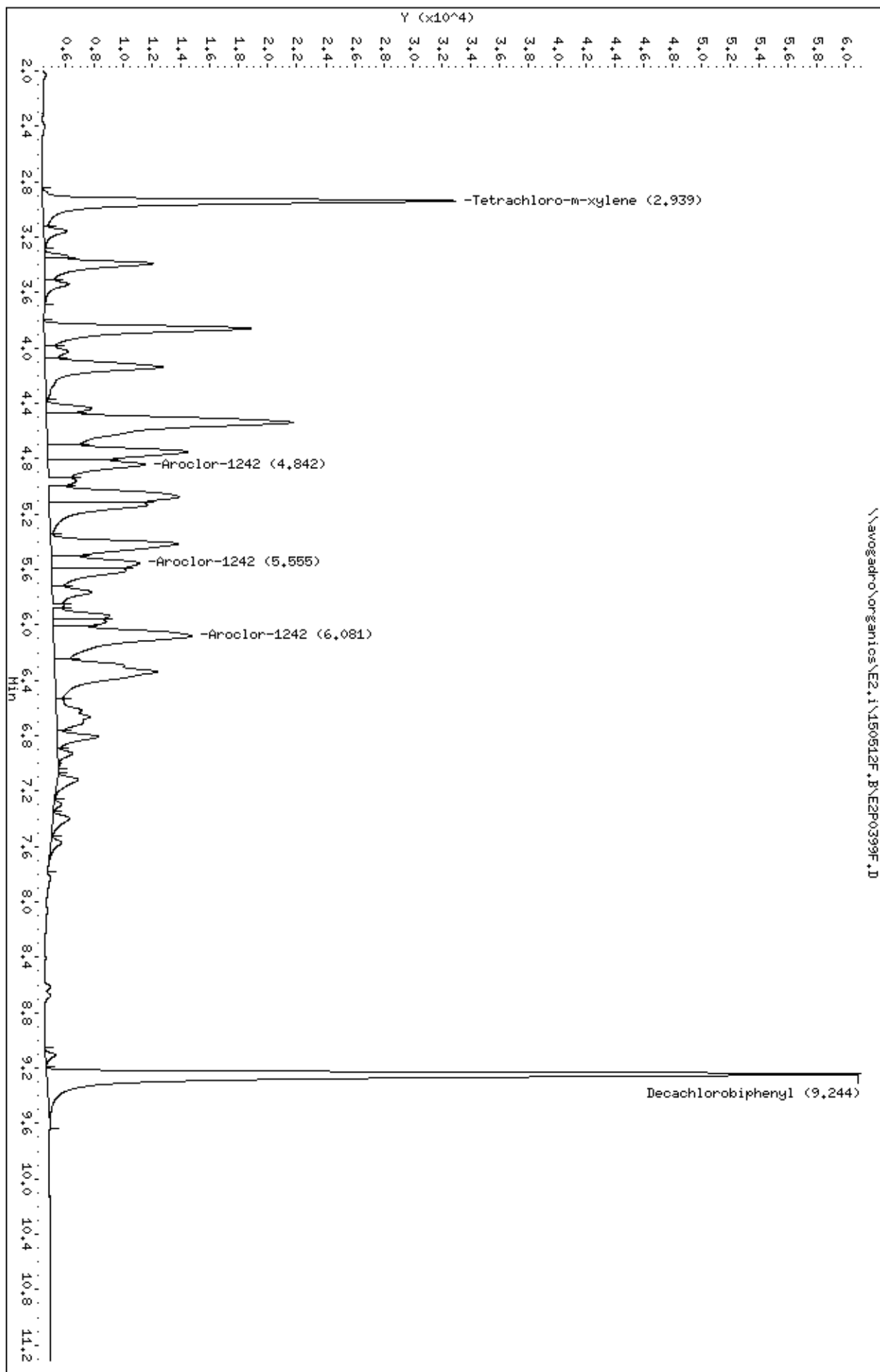
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.244	9.242	0.002	1694954 0.08000	0.072		

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0399F.D
Date: 12-May-2015 19:09
Client ID: AR12424E2
Sample Info: AR12424E2,AR12424E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0399R.D
 Lab Smp Id: AR12424E2 Client Smp ID: AR12424E2
 Inj Date : 12-MAY-2015 19:09
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12424E2,AR12424E2,,ar1242.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419R.D
 Als bottle: 7 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS									
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
3.625	3.623	0.002	25119	0.04000	0.042				(a)

4 Aroclor-1242					CAS #: 53469-21-9				
5.874	5.872	0.002	18954	0.80000	0.85	80.00-	120.00	100.00	(a)
6.075	6.073	0.002	10322	0.80000	0.84	31.47-	71.47	54.46	
6.406	6.404	0.002	9736	0.80000	0.79	28.03-	68.03	51.37	
Average of Peak Amounts =					0.82667				

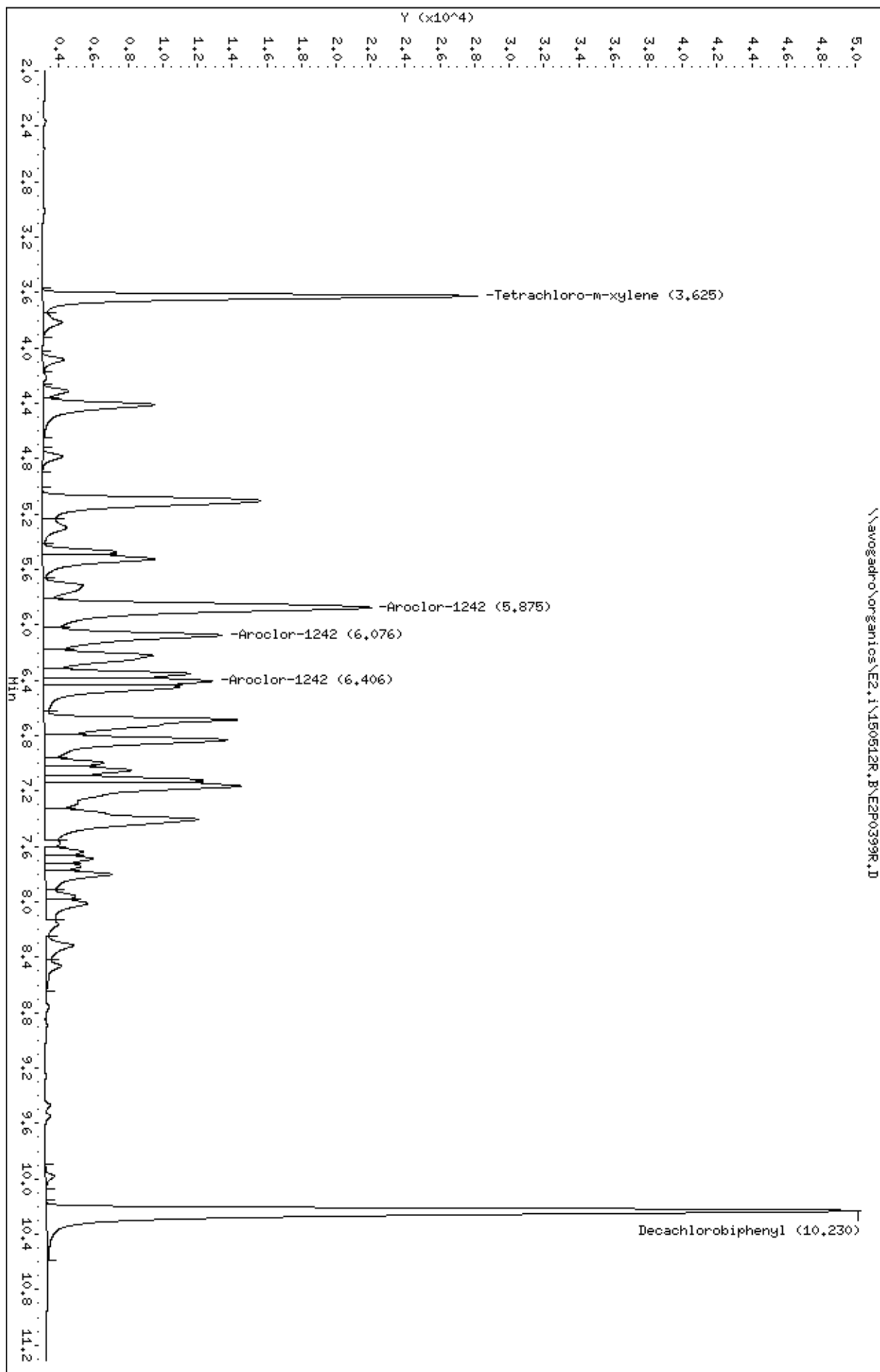
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3				
10.230	10.229	0.001	46987	0.08000	0.074				

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0399R.D
Date: 12-May-2015 19:09
Client ID: AR12424E2
Sample Info: AR12424E2,AR12424E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0400F.D
 Lab Smp Id: AR12425E2 Client Smp ID: AR12425E2
 Inj Date : 12-MAY-2015 19:24
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12425E2,AR12425E2,,ar1242.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 8 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

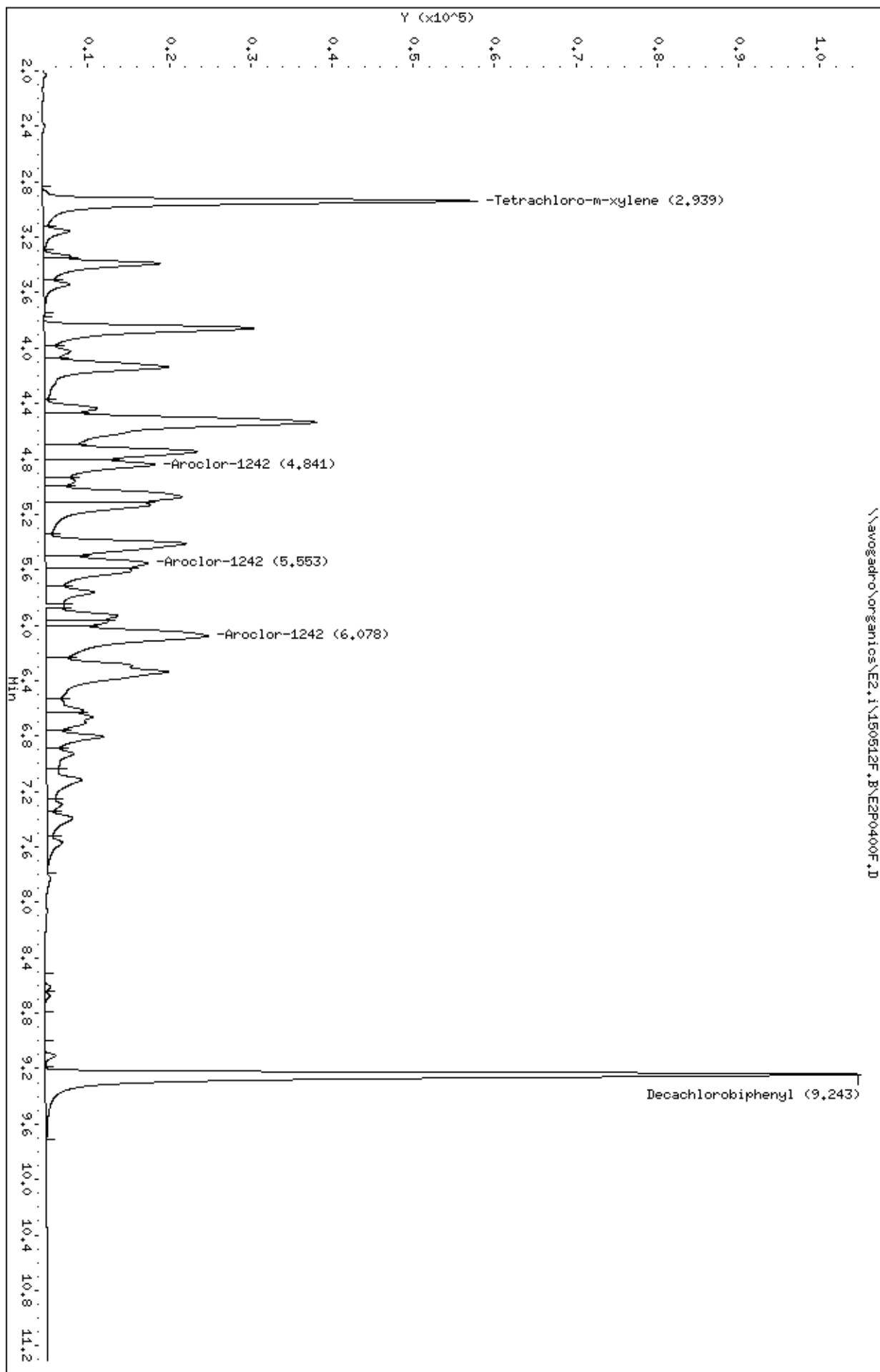
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.938	2.938	0.000	53559 0.08000	0.073		

6	Aroclor-1242		CAS #: 53469-21-9			
4.840	4.840	0.000	13545 1.60000	1.6 80.00- 120.00	100.00	
5.552	5.552	0.000	12537 1.60000	1.7 77.72- 117.72	92.56	
6.078	6.078	0.000	19996 1.60000	1.8 150.92- 190.92	147.63	
Average of Peak Amounts =			1.70000			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.243	9.242	0.001	3023982 0.16000	0.13		

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0400F.D
Date: 12-May-2015 19:24
Client ID: AR12425E2
Sample Info: AR12425E2,AR12425E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0400R.D
 Lab Smp Id: AR12425E2 Client Smp ID: AR12425E2
 Inj Date : 12-MAY-2015 19:24
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12425E2,AR12425E2,,ar1242.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
 Als bottle: 8 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1242.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

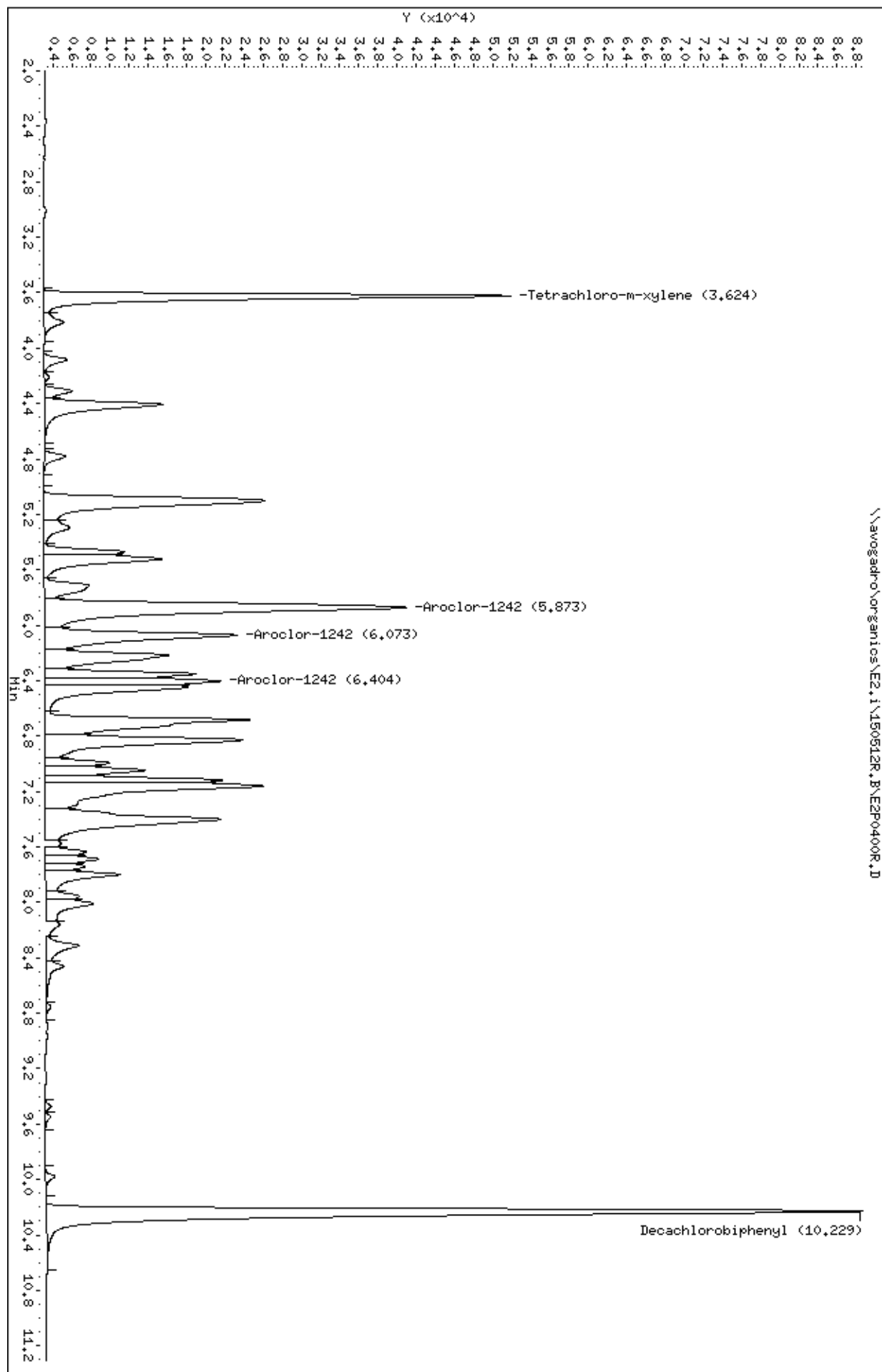
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.623	3.623	0.000	48844 0.08000	0.081		

4	Aroclor-1242		CAS #: 53469-21-9			
5.872	5.872	0.000	37930 1.60000	1.7 80.00- 120.00	100.00	
6.073	6.073	0.000	20133 1.60000	1.6 31.47- 71.47	53.08	
6.404	6.404	0.000	18380 1.60000	1.5 28.03- 68.03	48.46	
Average of Peak Amounts =			1.60000			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.229	10.229	0.000	85346 0.16000	0.14		

Data File: \\avogadro\organics\E2.i\150512R.B\EP0400R.D
Date : 12-May-2015 19:24
Client ID: AR12425E2
Sample Info: AR12425E2,AR12425E2,,ar1242,sub,,
Volume Injected (uL): 1.0
Column phase: CLP-PestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0401F.D
 Lab Smp Id: AR12481E2 Client Smp ID: AR12481E2
 Inj Date : 12-MAY-2015 19:38
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12481E2,AR12481E2,,ar1248.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415F.D
 Als bottle: 9 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.940	2.938	0.002	3834 0.00500	0.0052		(a)	

7 Aroclor-1248				CAS #: 12672-29-6			
6.079	6.073	0.006	1834 0.10000	0.096	80.00- 120.00	100.00(a)	
6.341	6.335	0.006	1654 0.10000	0.099	62.24- 102.24	90.19	
6.809	6.803	0.006	868 0.10000	0.091	30.44- 70.44	47.33	
Average of Peak Amounts =				0.09533			

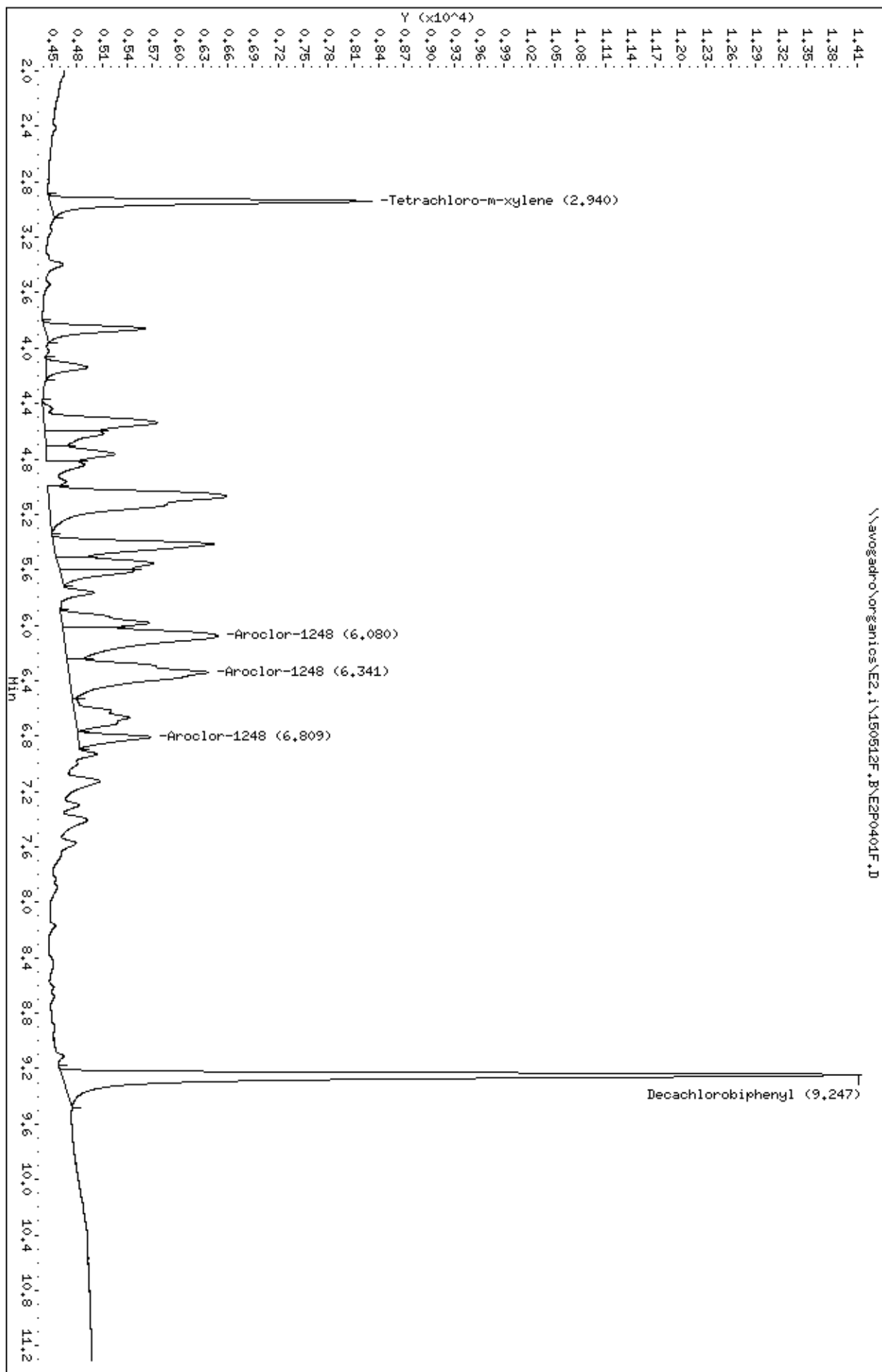
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.246	9.242	0.004	284732 0.01000	0.012		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0401F.D
Date: 12-May-2015 19:38
Client ID: AR12481E2
Sample Info: AR12481E2,AR12481E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0401R.D
Lab Smp Id: AR12481E2 Client Smp ID: AR12481E2
Inj Date : 12-MAY-2015 19:38
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12481E2,AR12481E2,,ar1248.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415R.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.626	3.623	0.003	2896 0.00500	0.0048		(a)

5 Aroclor-1248 CAS #: 12672-29-6						
7.052	7.045	0.007	803 0.10000	0.098	80.00- 120.00	100.00(a)
7.161	7.158	0.003	2500 0.10000	0.10	271.84- 311.84	311.33
7.802	7.796	0.006	1248 0.10000	0.10	117.48- 157.48	155.42
Average of Peak Amounts =			0.09933			

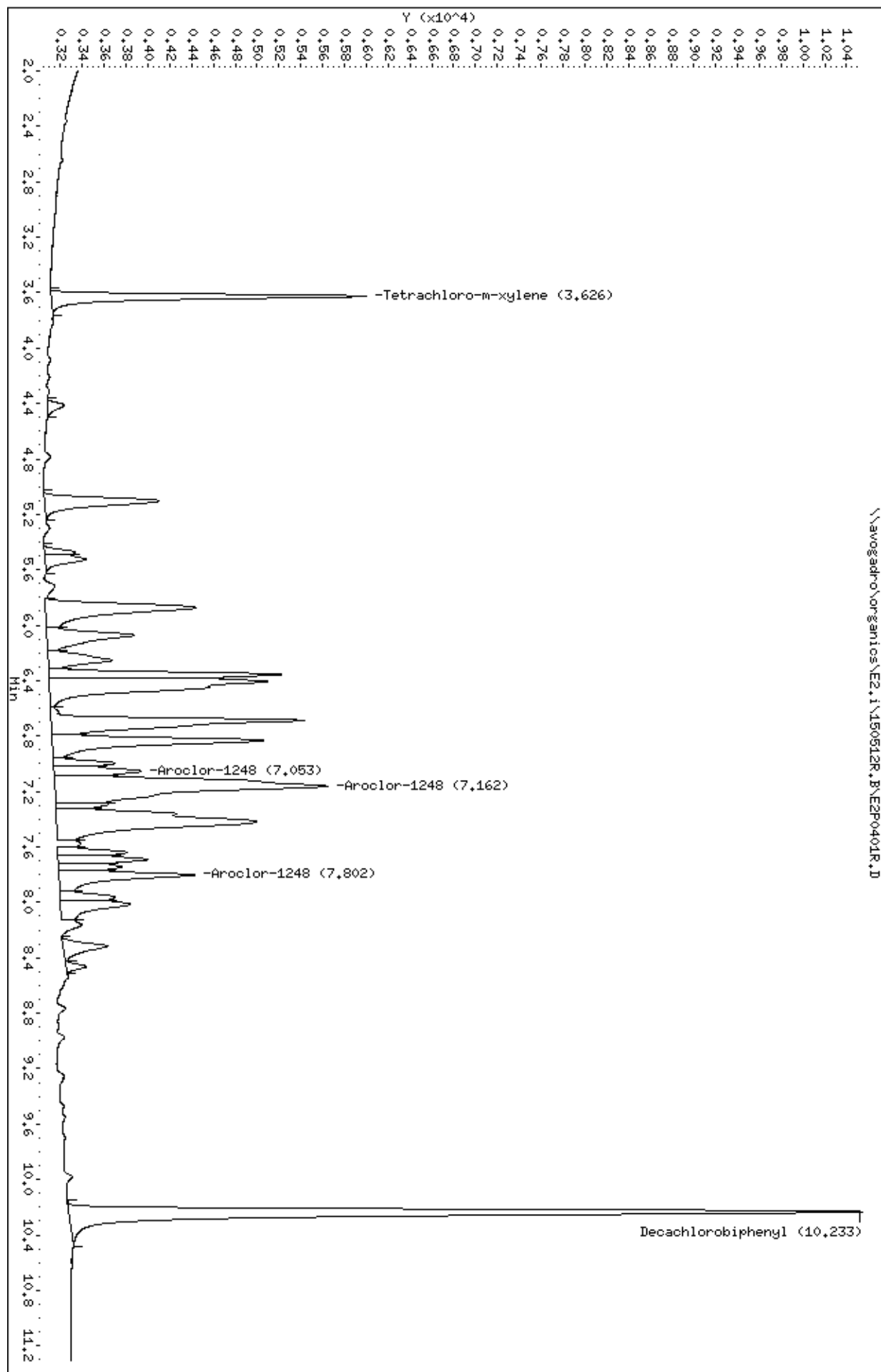
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.232	10.229	0.003	7271 0.01000	0.011		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0401R.D
 Date: 12-May-2015 19:38
 Client ID: AR12481E2
 Sample Info: AR12481E2,AR12481E2,,ar1248,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0402F.D
 Lab Smp Id: AR12486E2 Client Smp ID: AR12486E2
 Inj Date : 12-MAY-2015 19:53
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12486E2,AR12486E2,,ar1248.sub,,
 Misc Info : 1,6,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:19 Cal File: E2P0416F.D
 Als bottle: 10 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.939	2.938	0.001	1891 0.00000	0.0026		(a)

7	Aroclor-1248		CAS #: 12672-29-6			
6.080	6.073	0.007	861 0.05000	0.045	80.00- 120.00	100.00(a)
6.341	6.335	0.006	786 0.05000	0.047	62.24- 102.24	91.29
6.810	6.803	0.007	386 0.05000	0.040	30.44- 70.44	44.83
Average of Peak Amounts =			0.04400			

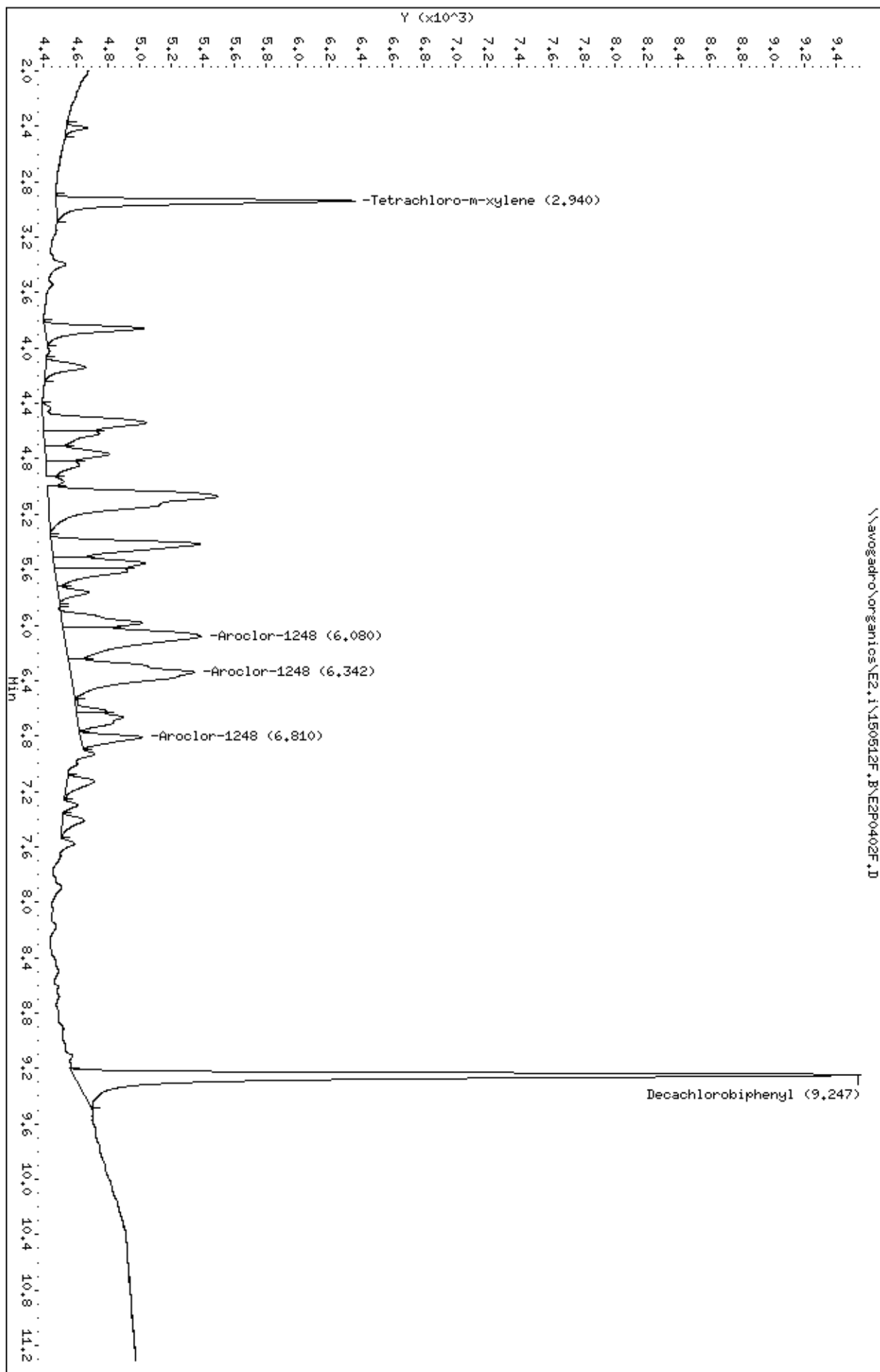
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.247	9.242	0.005	151401 0.00000	0.0063		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0402F.D
Date: 12-May-2015 19:53
Client ID: AR12486E2
Sample Info: AR12486E2,AR12486E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0402R.D
Lab Smp Id: AR12486E2 Client Smp ID: AR12486E2
Inj Date : 12-MAY-2015 19:53
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12486E2,AR12486E2,,ar1248.sub,,
Misc Info : 1,6,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 19:53 Cal File: E2P0402R.D
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	1375 0.00000	0.0023		(a)

5	Aroclor-1248		CAS #: 12672-29-6			
7.053	7.045	0.008	351 0.05000	0.045 80.00- 120.00	100.00(a)	
7.161	7.158	0.003	1200 0.05000	0.050 271.84- 311.84	341.88	
7.803	7.796	0.007	547 0.05000	0.048 117.48- 157.48	155.84	
Average of Peak Amounts =			0.04767			

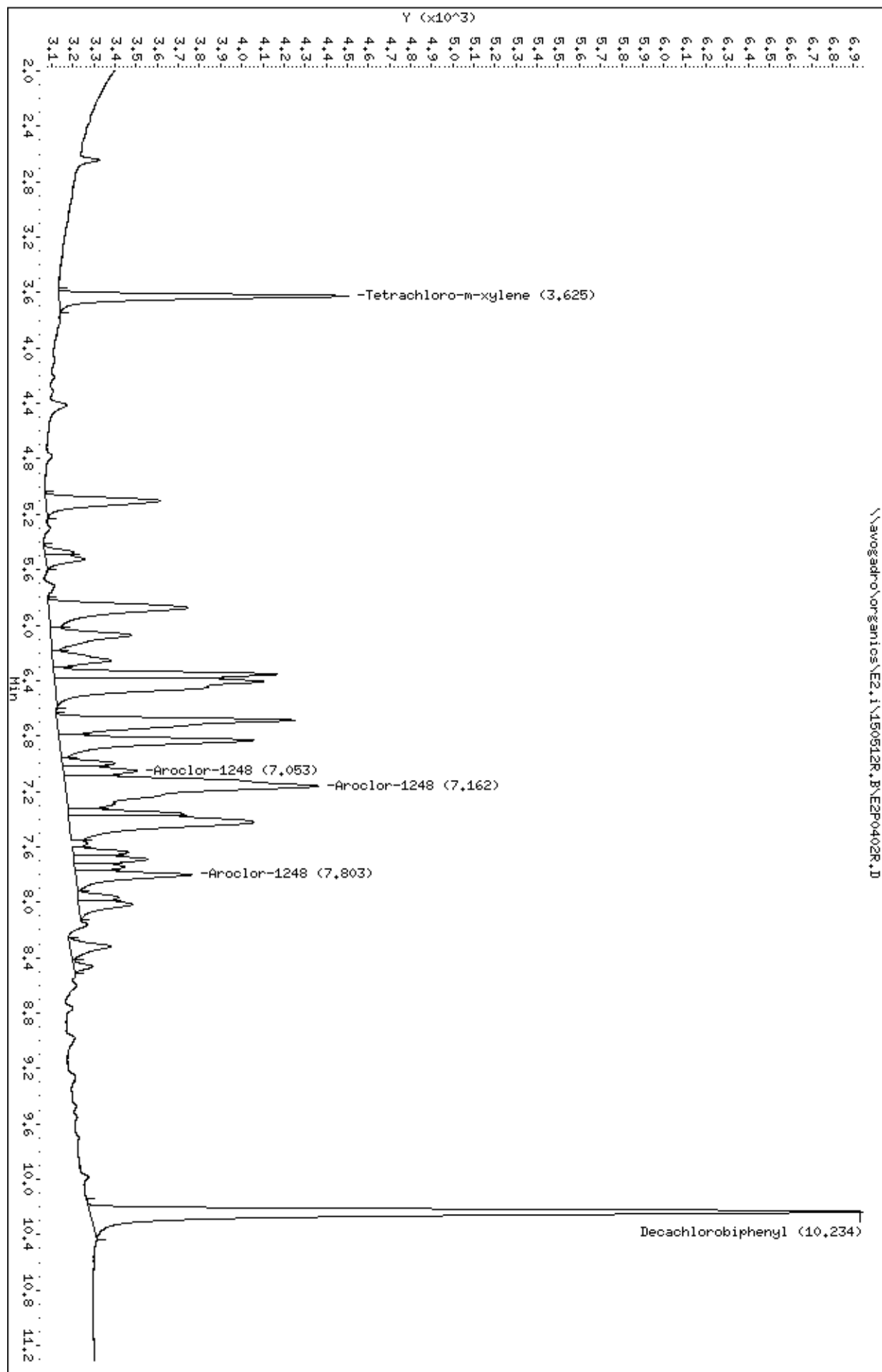
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.233	10.229	0.004	3665 0.00000	0.0058		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0402R.D
Date: 12-May-2015 19:53
Client ID: AR12486E2
Sample Info: AR12486E2,AR12486E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLP-PestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0403F.D
Lab Smp Id: AR12482E2 Client Smp ID: AR12482E2
Inj Date : 12-MAY-2015 20:08
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12482E2,AR12482E2,,ar1248.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417F.D
Als bottle: 11 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.939	2.938	0.001	7503 0.01000	0.010		(a)

7 Aroclor-1248 CAS #: 12672-29-6						
6.078	6.073	0.005	3699 0.20000	0.19	80.00- 120.00	100.00(a)
6.340	6.335	0.005	3375 0.20000	0.20	62.24- 102.24	91.24
6.808	6.803	0.005	2089 0.20000	0.22	30.44- 70.44	56.47
Average of Peak Amounts =			0.20333			

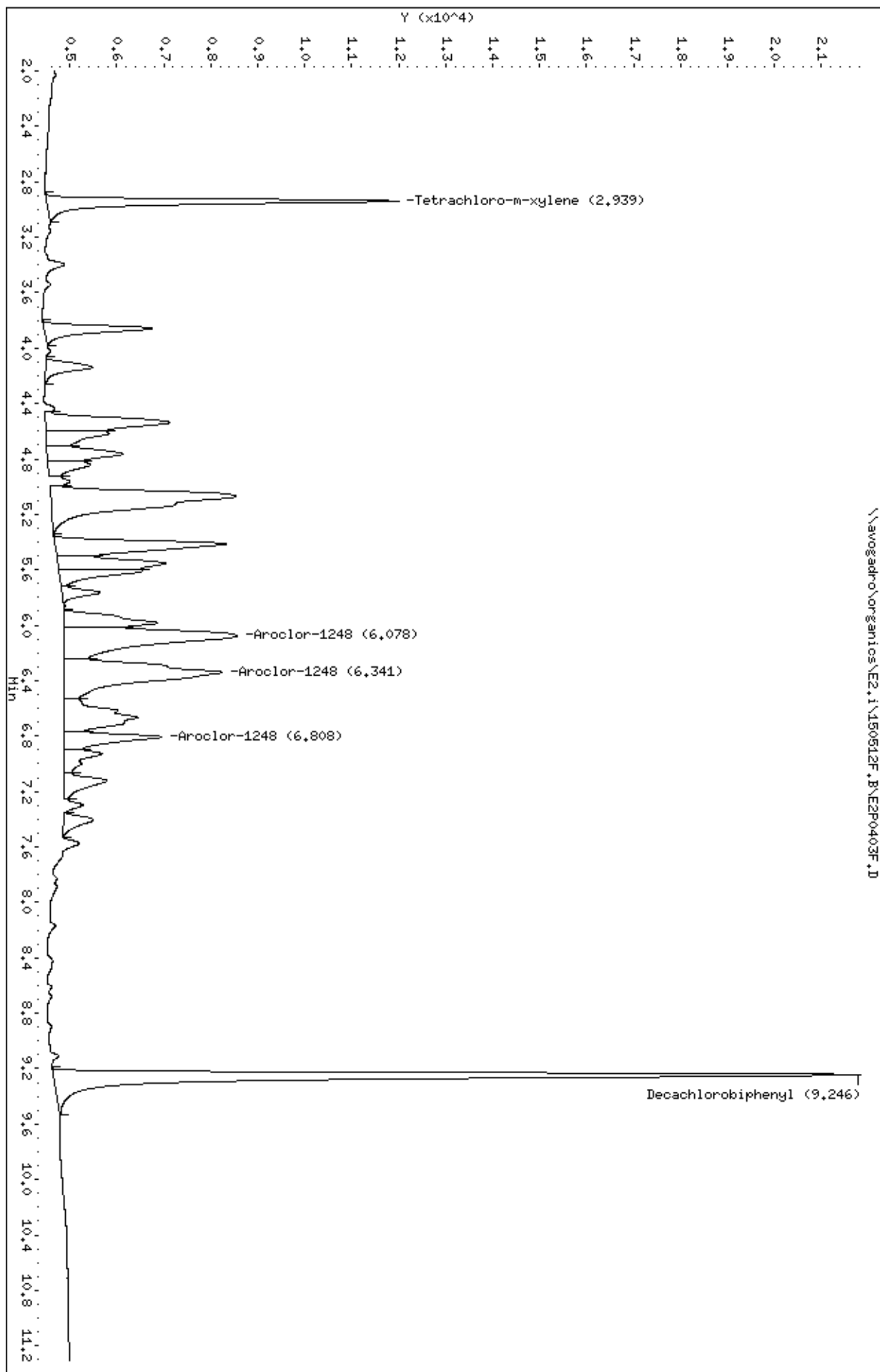
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.245	9.242	0.003	526832 0.02000	0.022		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0403F.D
 Date: 12-May-2015 20:08
 Client ID: AR12482E2
 Sample Info: AR12482E2,AR12482E2,,ar1248,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPest

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0403R.D
 Lab Smp Id: AR12482E2 Client Smp ID: AR12482E2
 Inj Date : 12-MAY-2015 20:08
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12482E2,AR12482E2,,ar1248.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417R.D
 Als bottle: 11 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.624	3.623	0.001	5935	0.01000	0.0097			(a)

5 Aroclor-1248					CAS #: 12672-29-6			
7.050	7.045	0.005	1664	0.20000	0.20	80.00-	120.00	100.00(a)
7.160	7.158	0.002	4967	0.20000	0.20	271.84-	311.84	298.50
7.800	7.796	0.004	2503	0.20000	0.21	117.48-	157.48	150.42
Average of Peak Amounts =					0.20333			

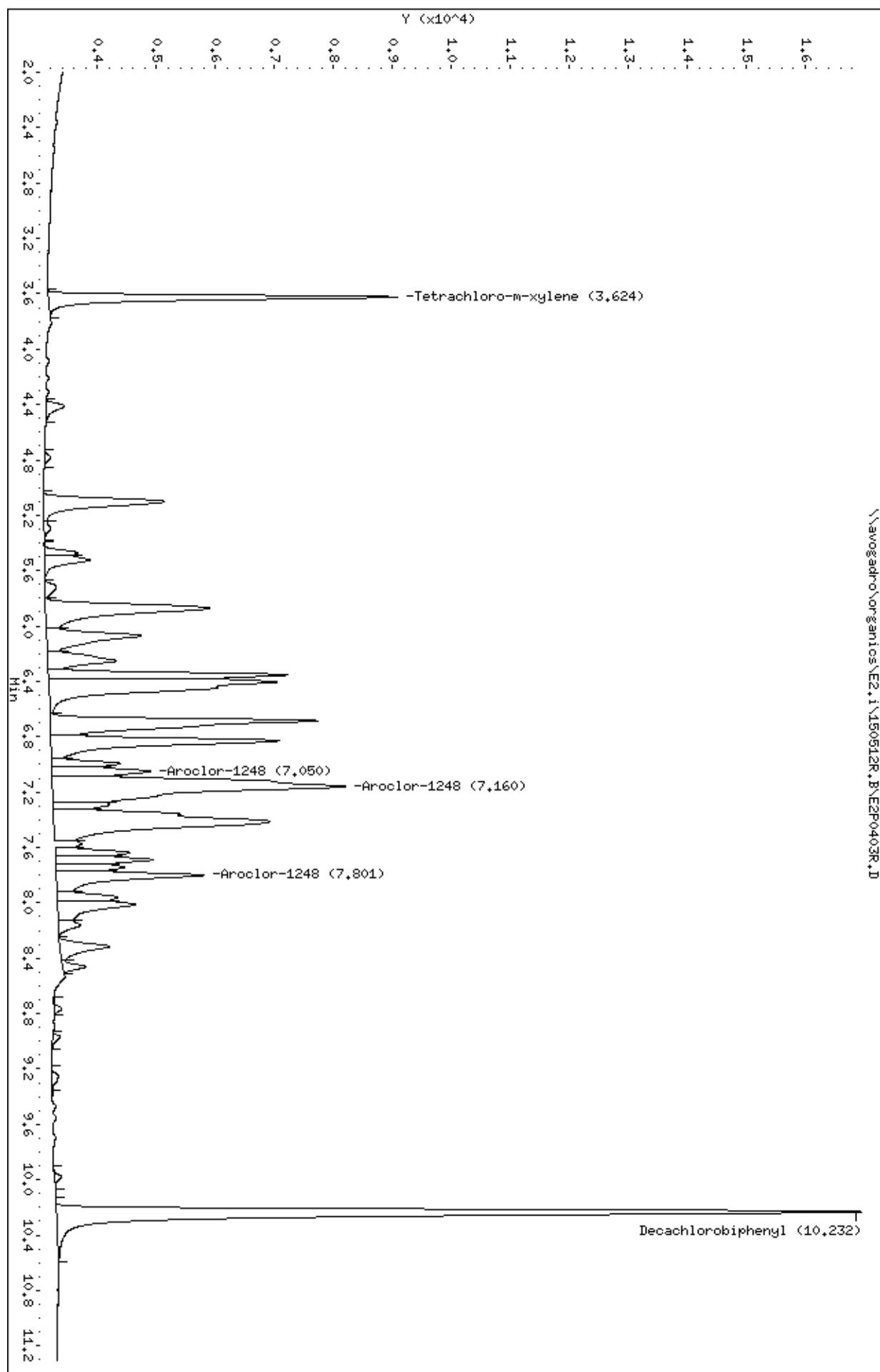
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.231	10.229	0.002	13663	0.02000	0.021			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0403R.D
Date : 12-May-2015 20:08
Client ID: AR12482E2
Sample Info: AR12482E2,AR12482E2,,ar-1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0404F.D
 Lab Smp Id: AR12483E2 Client Smp ID: AR12483E2
 Inj Date : 12-MAY-2015 20:22
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483E2,AR12483E2,,ar1248.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
 Als bottle: 12 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.938	2.938	0.000	15234 0.02000	0.021		(a)

7	Aroclor-1248		CAS #: 12672-29-6			
6.077	6.073	0.004	8301 0.40000	0.43	80.00- 120.00	100.00(a)
6.338	6.335	0.003	7348 0.40000	0.43	62.24- 102.24	88.52
6.806	6.803	0.003	4744 0.40000	0.46	30.44- 70.44	57.15
Average of Peak Amounts =			0.44000			

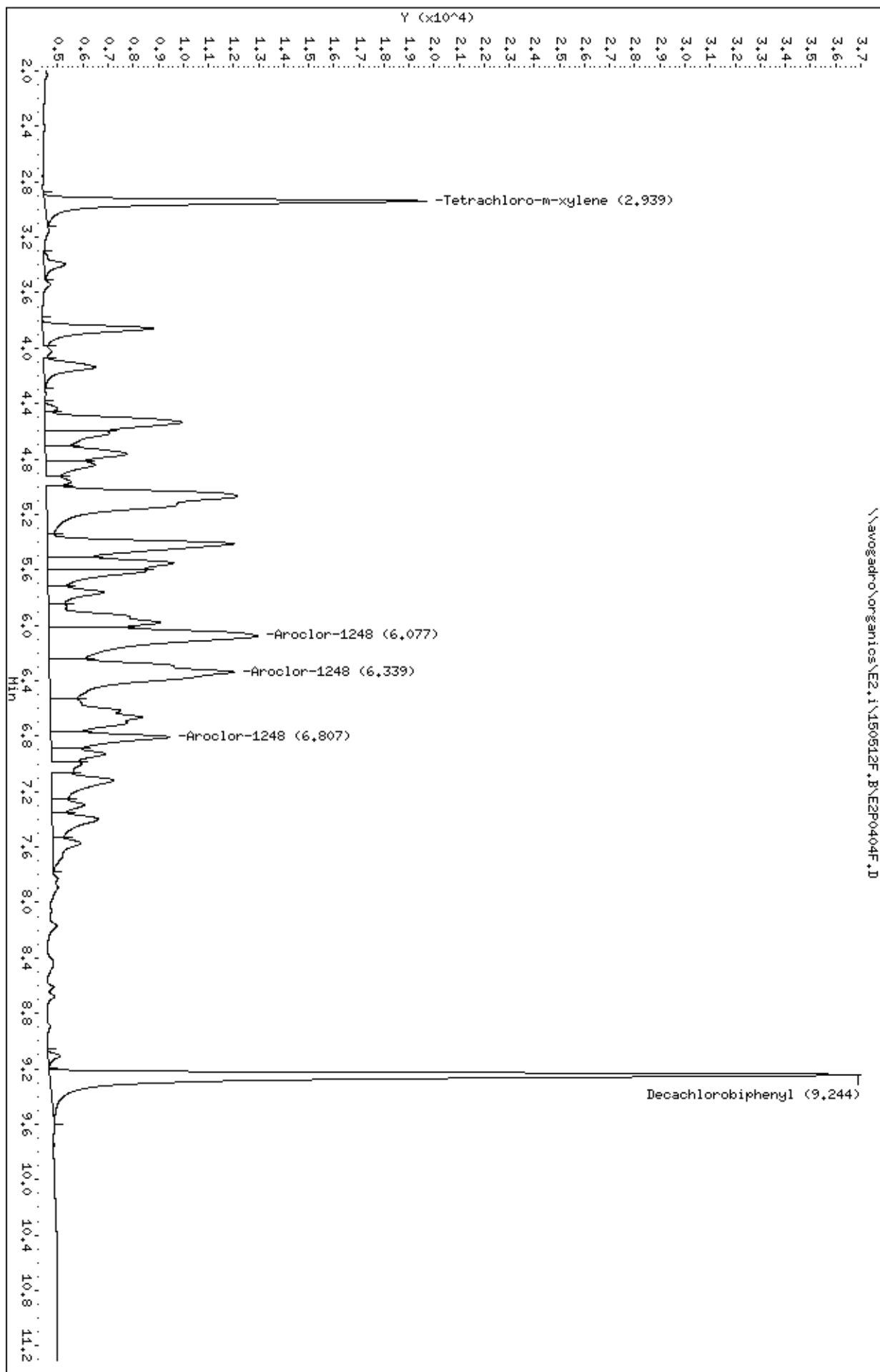
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.244	9.242	0.002	984243 0.04000	0.041		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0404F.D
Date: 12-May-2015 20:22
Client ID: AR12483E2
Sample Info: AR12483E2,AR12483E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0404R.D
 Lab Smp Id: AR12483E2 Client Smp ID: AR12483E2
 Inj Date : 12-MAY-2015 20:22
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483E2,AR12483E2,,ar1248.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
 Als bottle: 12 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	12856	0.02000	0.021			(a)

5 Aroclor-1248					CAS #: 12672-29-6			
7.049	7.045	0.004	3562	0.40000	0.42	80.00-	120.00	100.00(a)
7.159	7.158	0.001	10157	0.40000	0.41	271.84-	311.84	285.15
7.799	7.796	0.003	5147	0.40000	0.42	117.48-	157.48	144.50
Average of Peak Amounts =					0.41667			

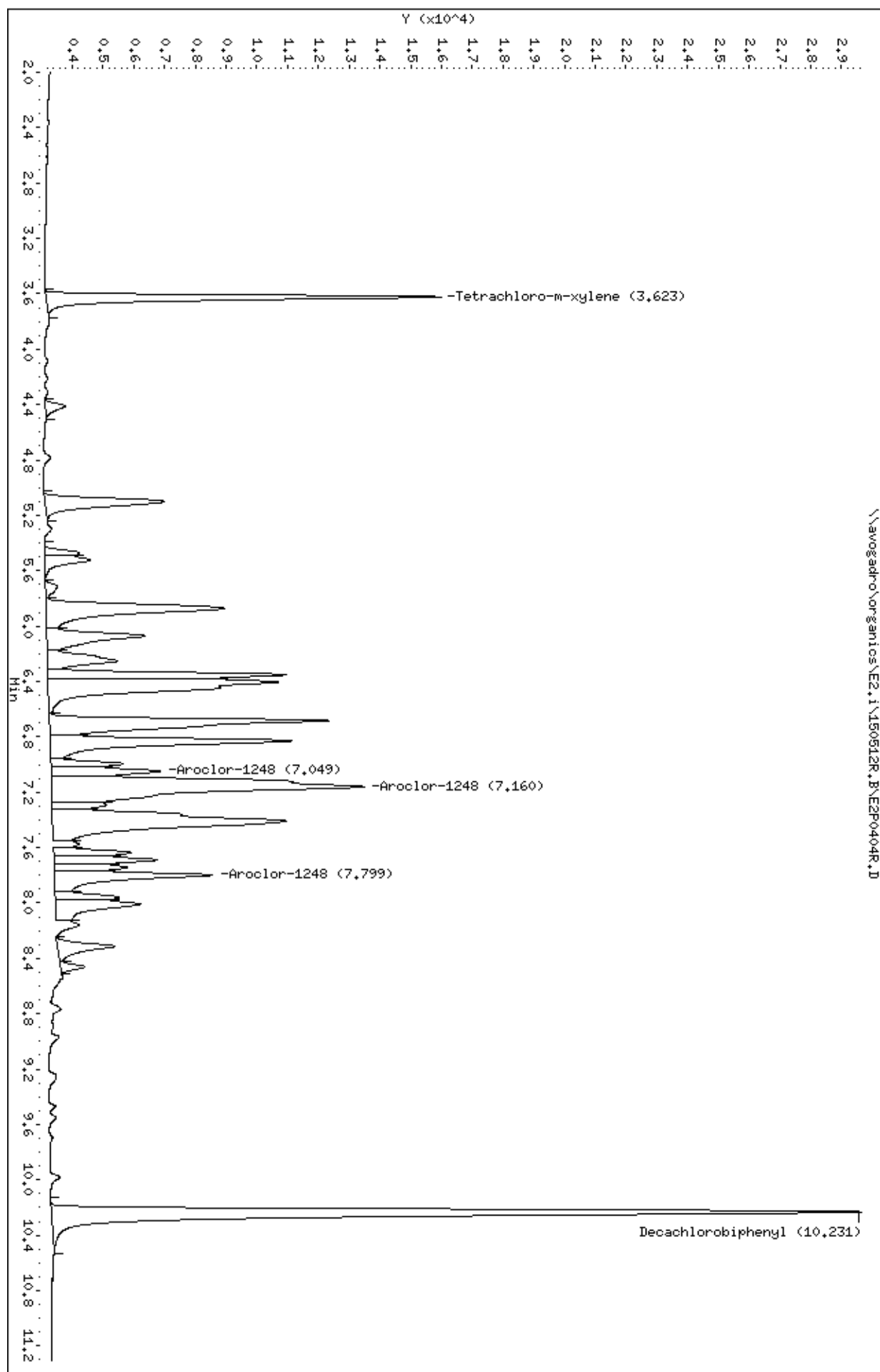
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.230	10.229	0.001	26330	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0404R.D
Date: 12-May-2015 20:22
Client ID: AR12483E2
Sample Info: AR12483E2,AR12483E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0405F.D
 Lab Smp Id: AR12484E2 Client Smp ID: AR12484E2
 Inj Date : 12-MAY-2015 20:37
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12484E2,AR12484E2,,ar1248.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419F.D
 Als bottle: 13 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.938	2.938	0.000	28309 0.04000	0.039			(a)

7 Aroclor-1248				CAS #: 12672-29-6			
6.076	6.073	0.003	16514 0.80000	0.85	80.00- 120.00	100.00	(a)
6.338	6.335	0.003	14399 0.80000	0.84	62.24- 102.24	87.19	
6.806	6.803	0.003	9457 0.80000	0.91	30.44- 70.44	57.27	
Average of Peak Amounts =				0.86667			

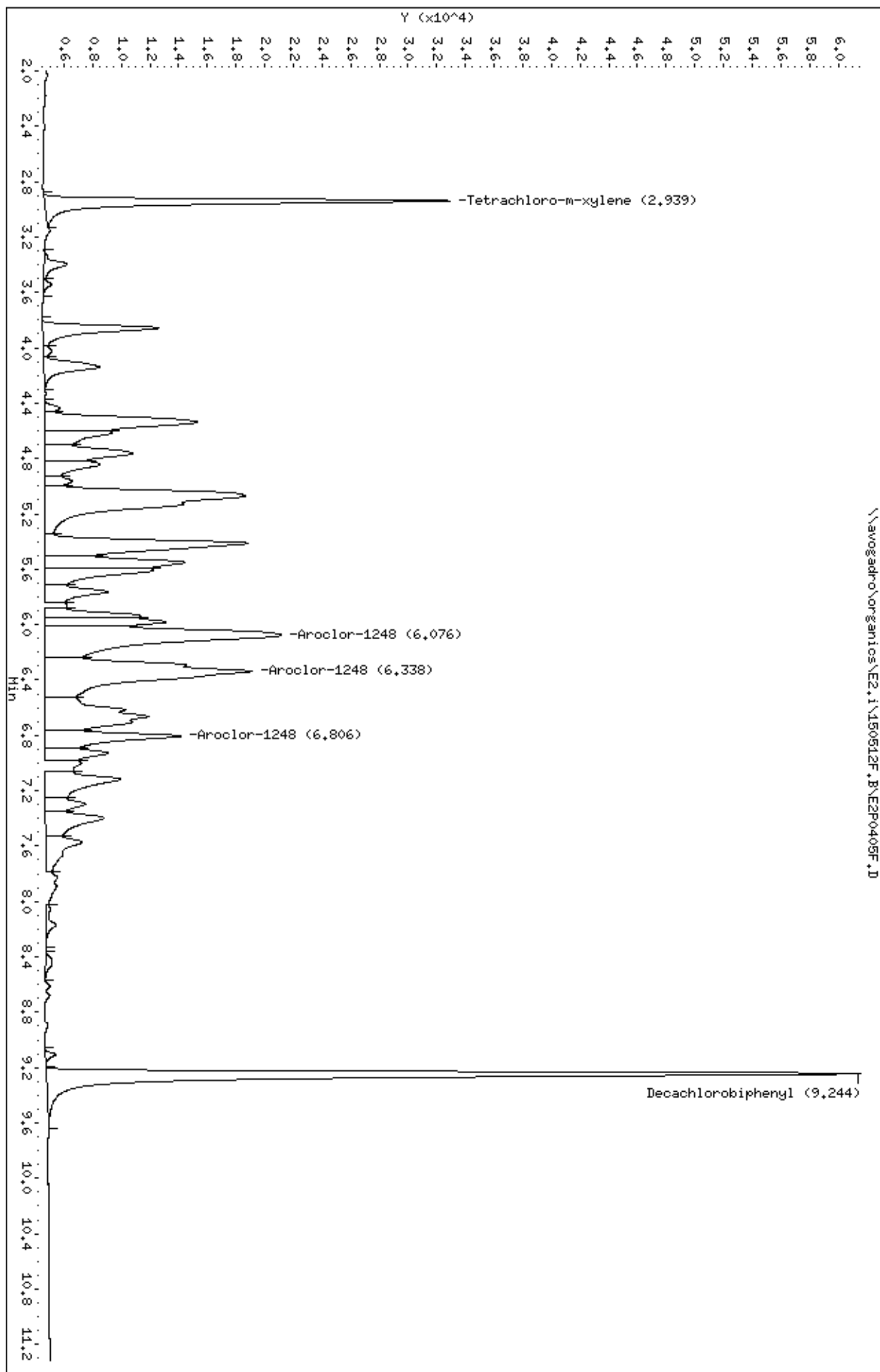
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.244	9.242	0.002	1737829 0.08000	0.072			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.i\150512F.B\E2P0405F.D
Date : 12-May-2015 20:37
Client ID: AR12484E2
Sample Info: AR12484E2,AR12484E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0405R.D
 Lab Smp Id: AR12484E2 Client Smp ID: AR12484E2
 Inj Date : 12-MAY-2015 20:37
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12484E2,AR12484E2,,ar1248.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419R.D
 Als bottle: 13 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	25166	0.04000	0.041			(a)

5 Aroclor-1248					CAS #: 12672-29-6			
7.048	7.045	0.003	7645	0.80000	0.90	80.00-	120.00	100.00(a)
7.159	7.158	0.001	20549	0.80000	0.82	271.84-	311.84	268.79
7.798	7.796	0.002	10742	0.80000	0.87	117.48-	157.48	140.51
Average of Peak Amounts =					0.86333			

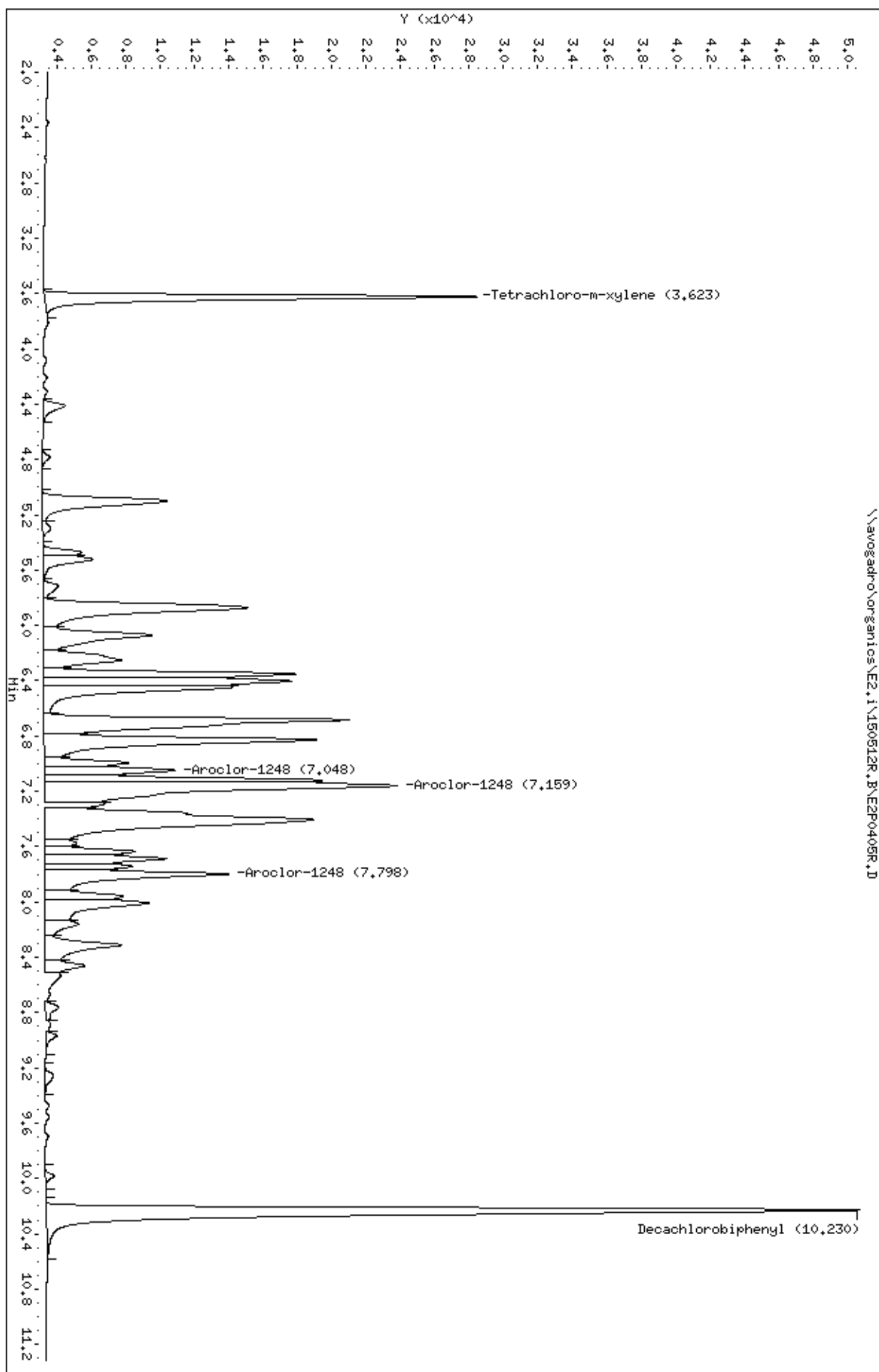
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.230	10.229	0.001	47353	0.08000	0.074			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0405R.D
Date: 12-May-2015 20:37
Client ID: AR12484E2
Sample Info: AR12484E2,AR12484E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0406F.D
 Lab Smp Id: AR12485E2 Client Smp ID: AR12485E2
 Inj Date : 12-MAY-2015 20:52
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12485E2,AR12485E2,,ar1248.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 14 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

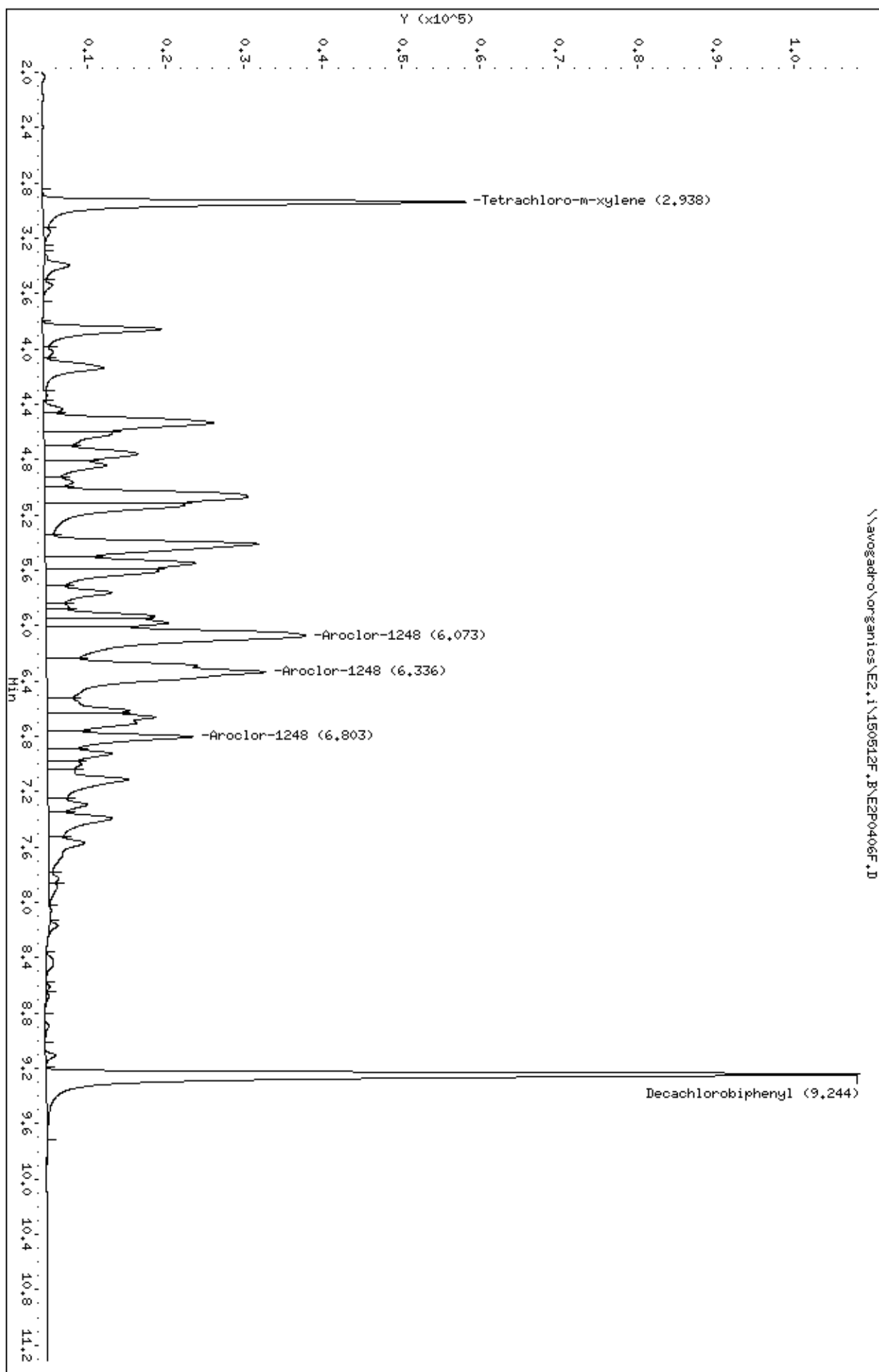
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.938	-0.001	53924	0.08000	0.074	

7	Aroclor-1248		CAS #: 12672-29-6			
6.073	6.073	0.000	33036	1.60000	1.7 80.00- 120.00	100.00
6.335	6.335	0.000	27837	1.60000	1.6 62.24- 102.24	84.26
6.803	6.803	0.000	18429	1.60000	1.8 30.44- 70.44	55.78
Average of Peak Amounts =			1.70000			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.243	9.242	0.001	3134034	0.16000	0.13	

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0406F.D
Date: 12-May-2015 20:52
Client ID: AR12485E2
Sample Info: AR12485E2,AR12485E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0406R.D
 Lab Smp Id: AR12485E2 Client Smp ID: AR12485E2
 Inj Date : 12-MAY-2015 20:52
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12485E2,AR12485E2,,ar1248.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
 Als bottle: 14 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

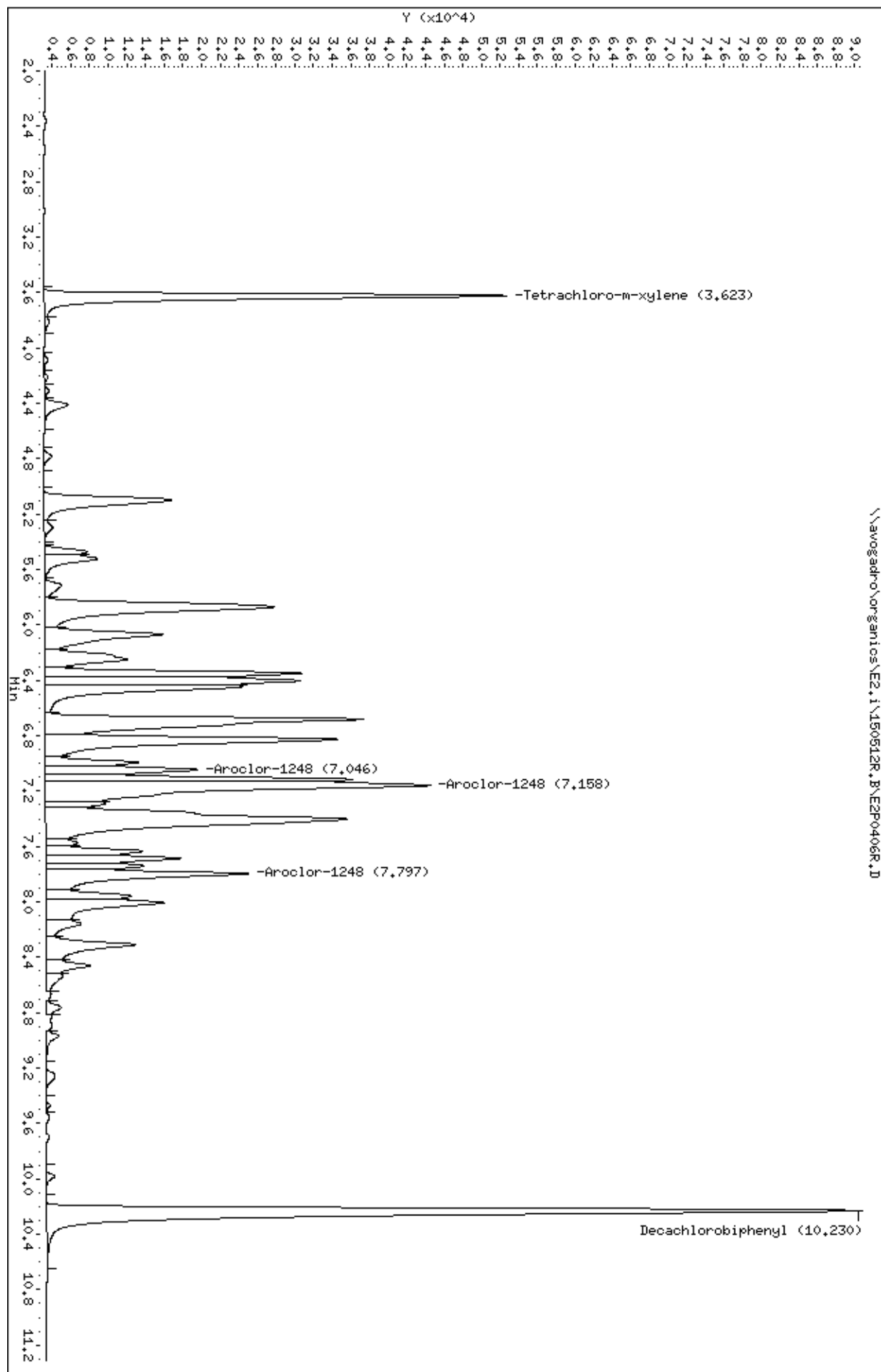
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.622	3.623	-0.001	49650 0.08000	0.081		

5	Aroclor-1248		CAS #: 12672-29-6			
7.045	7.045	0.000	16338 1.60000	1.9	80.00- 120.00	100.00
7.158	7.158	0.000	41254 1.60000	1.6	271.84- 311.84	252.50
7.796	7.796	0.000	21724 1.60000	1.7	117.48- 157.48	132.97
Average of Peak Amounts =			1.73333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.229	10.229	0.000	87408 0.16000	0.14		

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0406R.D
Date: 12-May-2015 20:52
Client ID: AR12485E2
Sample Info: AR12485E2,AR12485E2,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0407F.D
Lab Smp Id: AR12541E2 Client Smp ID: AR12541E2
Inj Date : 12-MAY-2015 21:07
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12541E2,AR12541E2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415F.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

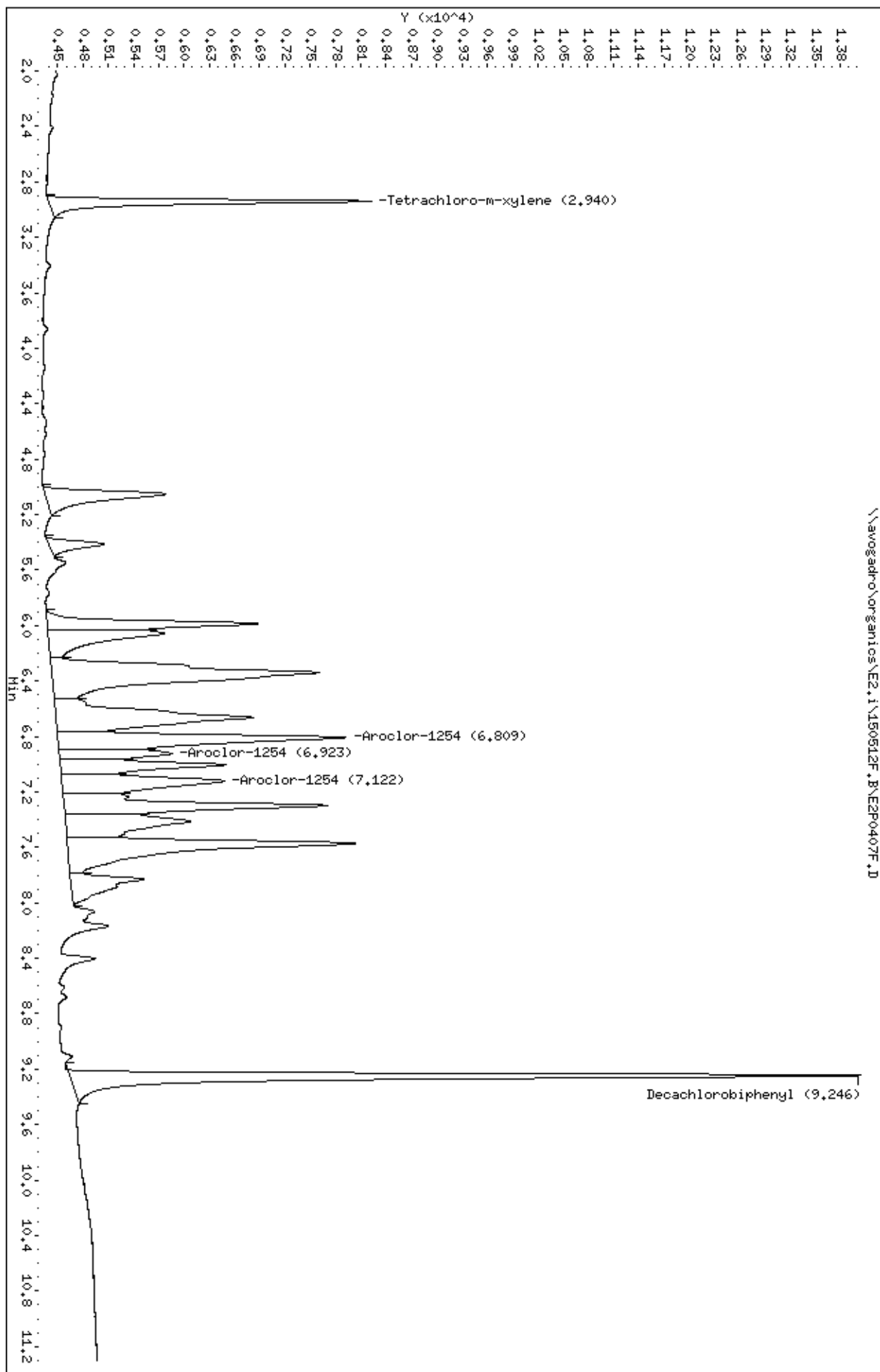
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.939	2.938	0.001	3841 0.00500	0.0052		(a)
\$ 11					CAS #: 2051-24-3	
9.245	9.242	0.003	275774 0.01000	0.012		(a)
8					CAS #: 11097-69-1	
6.808	6.801	0.007	3412 0.10000	0.10	80.00- 120.00	100.00(a)
6.923	6.920	0.003	1339 0.10000	0.12	8.67- 48.67	39.24
7.121	7.107	0.014	1930 0.10000	0.10	43.10- 83.10	56.57
Average of Peak Amounts =			0.10667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0407F.D
Date: 12-May-2015 21:07
Client ID: AR12541E2
Sample Info: AR12541E2,AR12541E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0407R.D
Lab Smp Id: AR12541E2 Client Smp ID: AR12541E2
Inj Date : 12-MAY-2015 21:07
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12541E2,AR12541E2,,ar1254.sub,,
Misc Info : 1,1,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415R.D
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

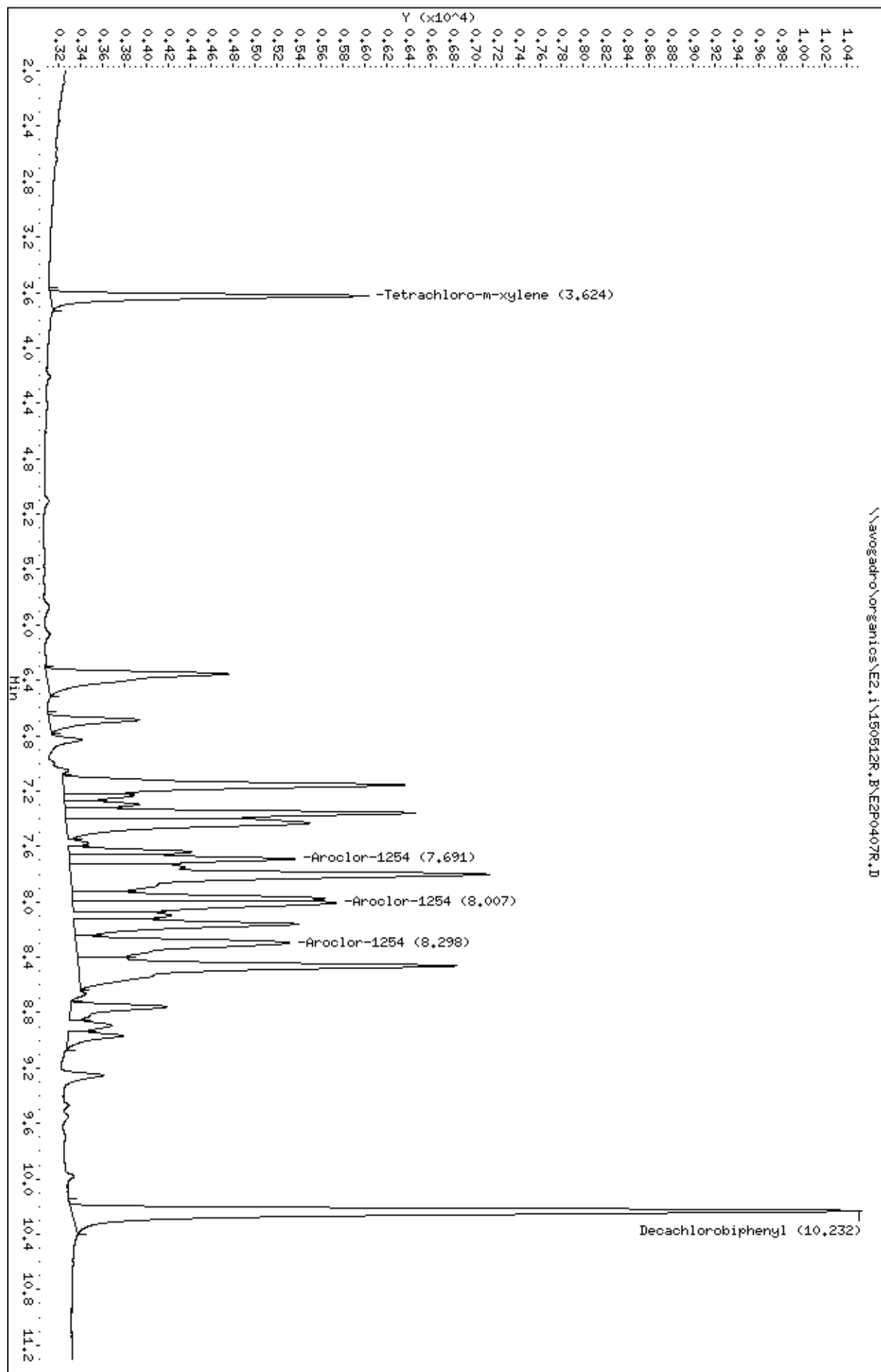
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.624	3.623	0.001	2908 0.00500	0.0047		(a)
\$ 11					CAS #: 2051-24-3	
10.231	10.229	0.002	7223 0.01000	0.011		(a)
7					CAS #: 11097-69-1	
7.690	7.685	0.005	2057 0.10000	0.098	80.00- 120.00	100.00(a)
8.006	8.000	0.006	2405 0.10000	0.098	104.84- 144.84	116.92
8.297	8.298	-0.001	1947 0.10000	0.094	77.17- 117.17	94.65
Average of Peak Amounts =			0.09667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0407R.D
Date : 12-May-2015 21:07
Client ID: AR12541E2
Sample Info: AR12541E2,AR12541E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0408F.D
 Lab Smp Id: AR12546E2 Client Smp ID: AR12546E2
 Inj Date : 12-MAY-2015 21:21
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12546E2,AR12546E2,,ar1254.sub,,
 Misc Info : 1,6,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:19 Cal File: E2P0416F.D
 Als bottle: 16 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

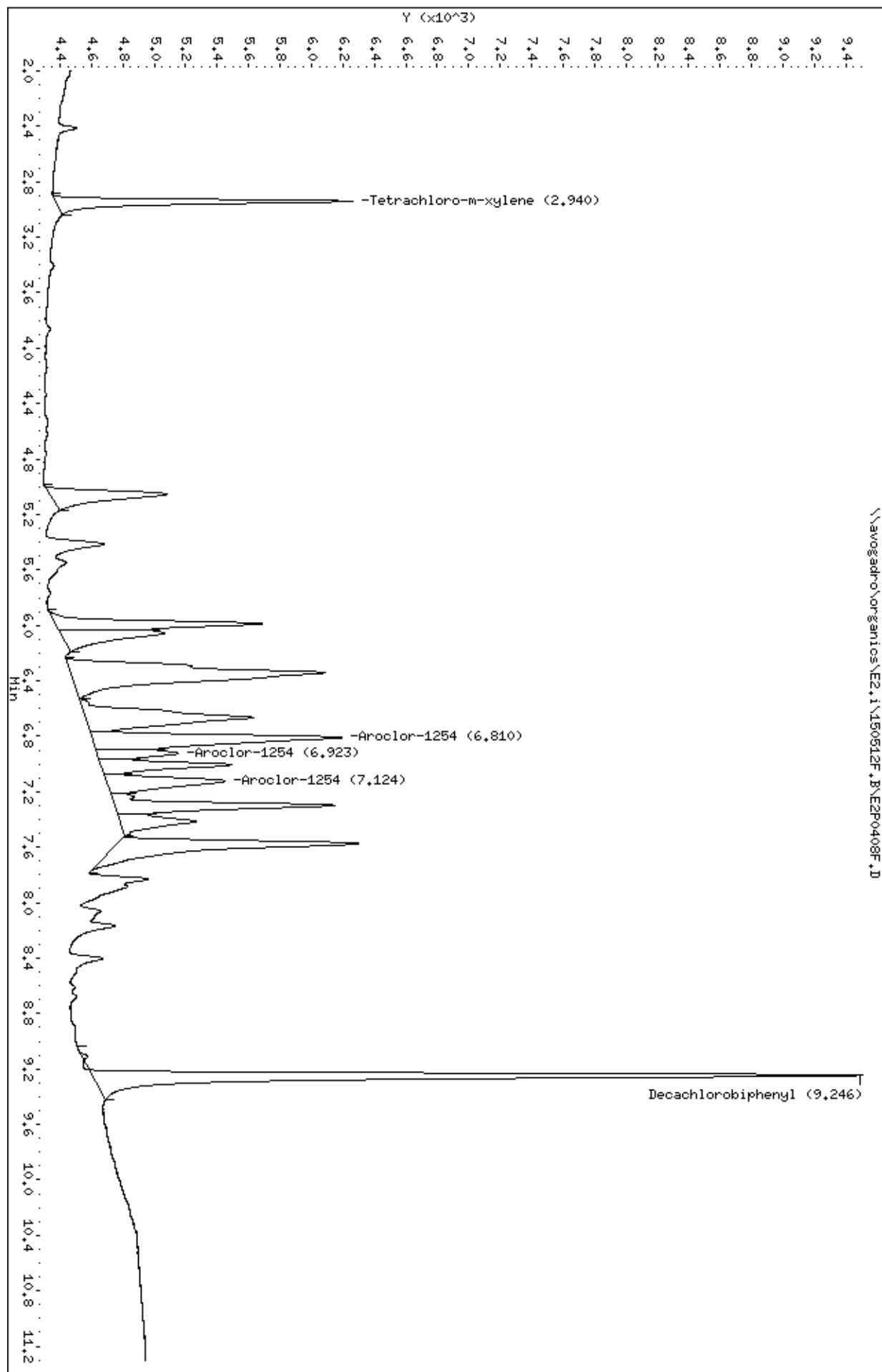
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.940	2.938	0.002	1887 0.00000	0.0026		(a)
\$ 11					CAS #: 2051-24-3	
9.245	9.242	0.003	142081 0.00000	0.0059		(a)
8					CAS #: 11097-69-1	
6.810	6.801	0.009	1590 0.05000	0.049	80.00- 120.00	100.00(a)
6.923	6.920	0.003	514 0.05000	0.048	8.67- 48.67	32.33
7.124	7.107	0.017	753 0.05000	0.042	43.10- 83.10	47.36
Average of Peak Amounts =			0.04633			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0408F.D
Date : 12-May-2015 21:21
Client ID: AR12546E2
Sample Info: AR12546E2,AR12546E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0408R.D
Lab Smp Id: AR12546E2 Client Smp ID: AR12546E2
Inj Date : 12-MAY-2015 21:21
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12546E2,AR12546E2,,ar1254.sub,,
Misc Info : 1,6,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 21:21 Cal File: E2P0408R.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
		CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.625	3.623	0.002	1376 0.00000	0.0022		(a)

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.233	10.229	0.004	3650 0.00000	0.0057		(a)

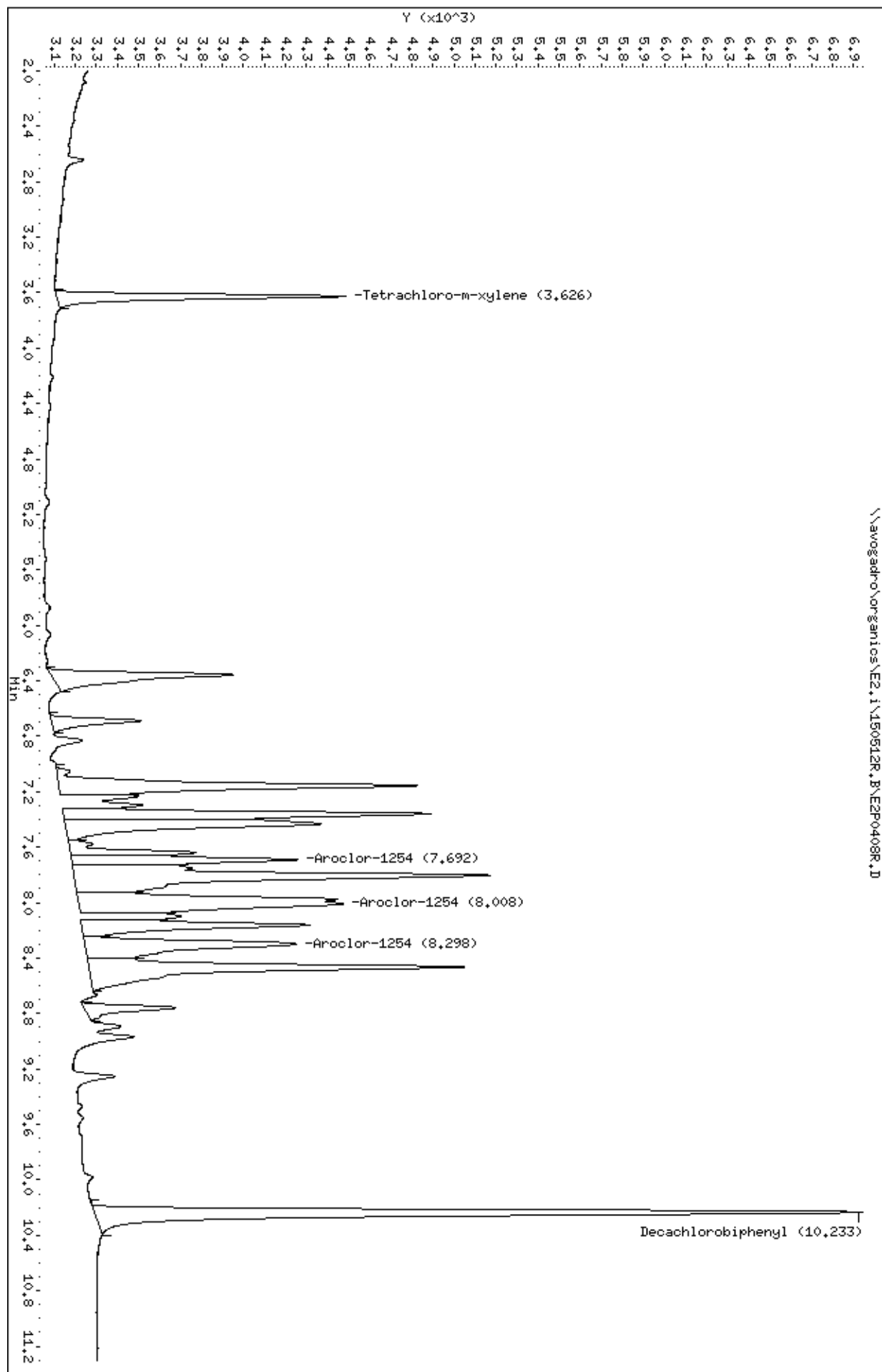
7 Aroclor-1254 CAS #: 11097-69-1						
7.691	7.685	0.006	1074 0.05000	0.051	80.00- 120.00	100.00(a)
8.008	8.000	0.008	1258 0.05000	0.051	104.84- 144.84	117.13
8.298	8.298	0.000	1002 0.05000	0.049	77.17- 117.17	93.30
Average of Peak Amounts =			0.05033			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0408R.D
Date: 12-May-2015 21:21
Client ID: AR12546E2
Sample Info: AR12546E2,AR12546E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0409F.D
Lab Smp Id: AR12542E2 Client Smp ID: AR12542E2
Inj Date : 12-MAY-2015 21:36
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12542E2, AR12542E2, , ar1254.sub, ,
Misc Info : 1, 2, , 1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417F.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

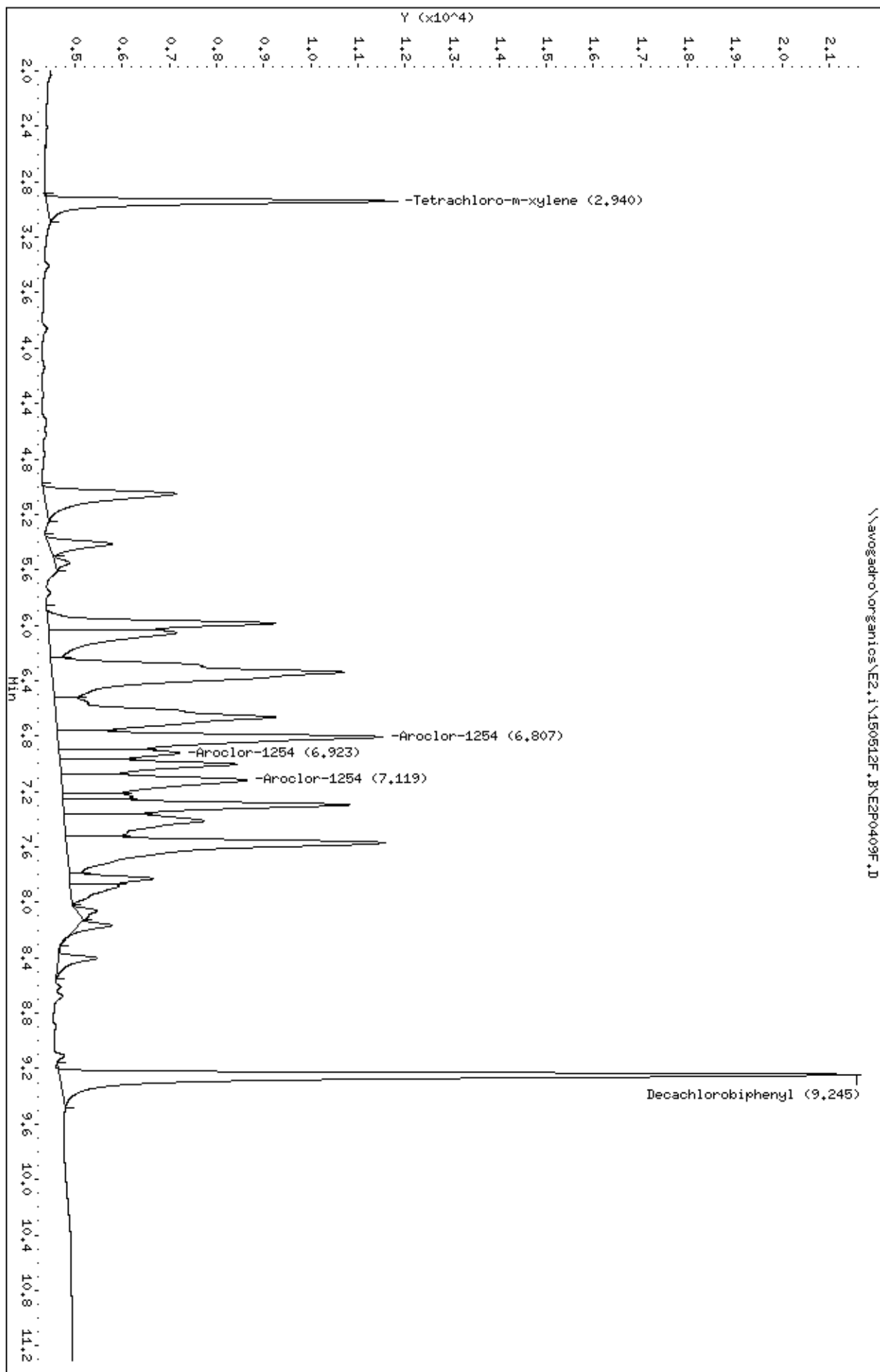
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.939	2.938	0.001	7462 0.01000	0.010		(a)
\$ 11					CAS #: 2051-24-3	
9.244	9.242	0.002	505624 0.02000	0.021		(a)
8					CAS #: 11097-69-1	
6.807	6.801	0.006	6885 0.20000	0.21	80.00- 120.00	100.00(a)
6.923	6.920	0.003	2568 0.20000	0.23	8.67- 48.67	37.30
7.119	7.107	0.012	3948 0.20000	0.21	43.10- 83.10	57.34
Average of Peak Amounts =			0.21667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0409F.D
Date : 12-May-2015 21:36
Client ID: AR12542E2
Sample Info: AR12542E2,AR12542E2,,ar1254,sub,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0409R.D
Lab Smp Id: AR12542E2 Client Smp ID: AR12542E2
Inj Date : 12-MAY-2015 21:36
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12542E2,AR12542E2,,ar1254.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417R.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.624	3.623	0.001	5902 0.01000	0.0096		(a)

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.231	10.229	0.002	13494 0.02000	0.021		(a)

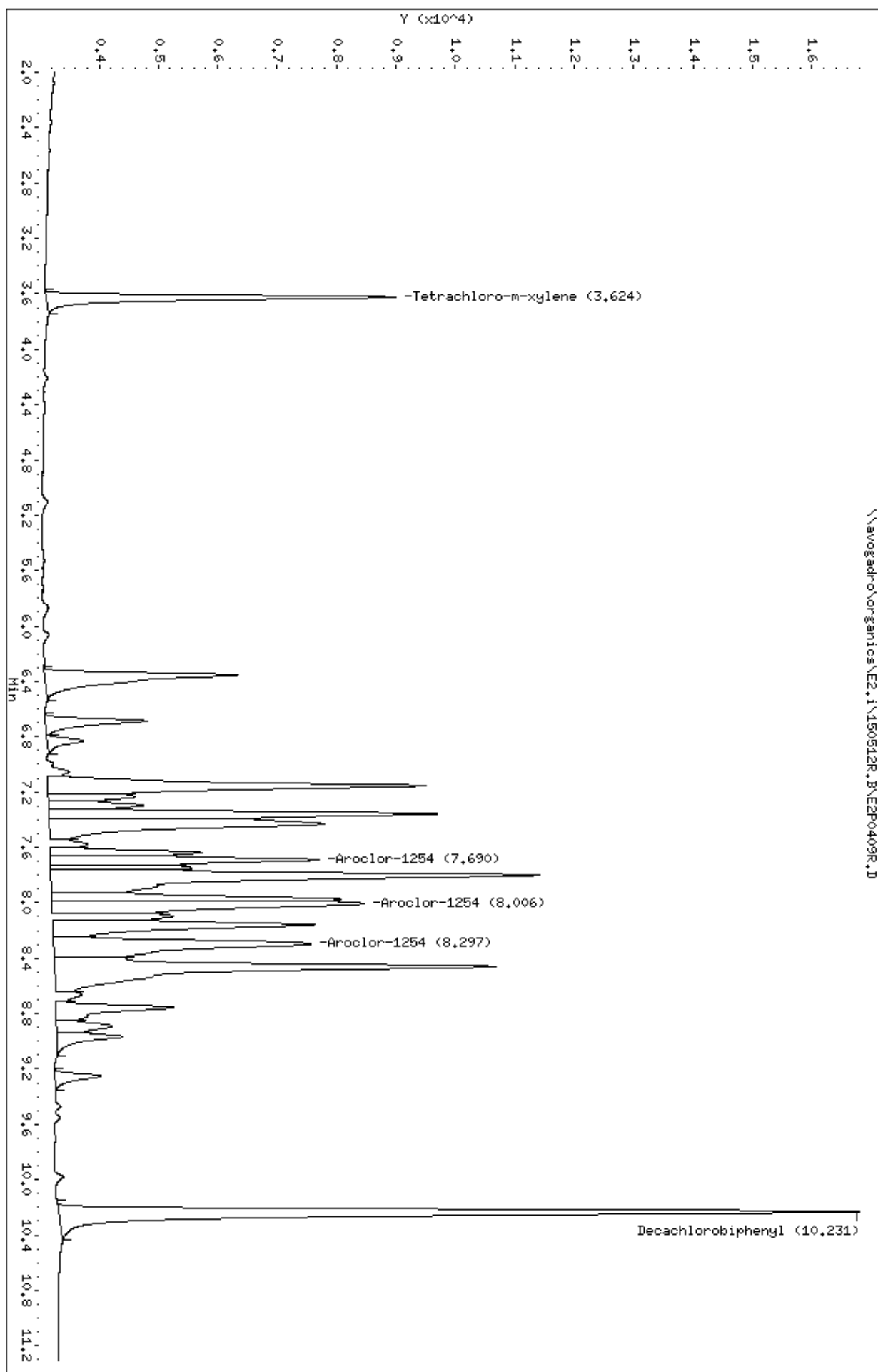
7 Aroclor-1254 CAS #: 11097-69-1						
7.689	7.685	0.004	4525 0.20000	0.21	80.00- 120.00	100.00(a)
8.005	8.000	0.005	5267 0.20000	0.21	104.84- 144.84	116.40
8.297	8.298	-0.001	4339 0.20000	0.21	77.17- 117.17	95.89
Average of Peak Amounts =			0.21000			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0409R.D
Date: 12-May-2015 21:36
Client ID: AR12542E2
Sample Info: AR12542E2,AR12542E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLP-PestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0410F.D
 Lab Smp Id: AR12543E2 Client Smp ID: AR12543E2
 Inj Date : 12-MAY-2015 21:51
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12543E2,AR12543E2,,ar1254.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
 Als bottle: 18 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

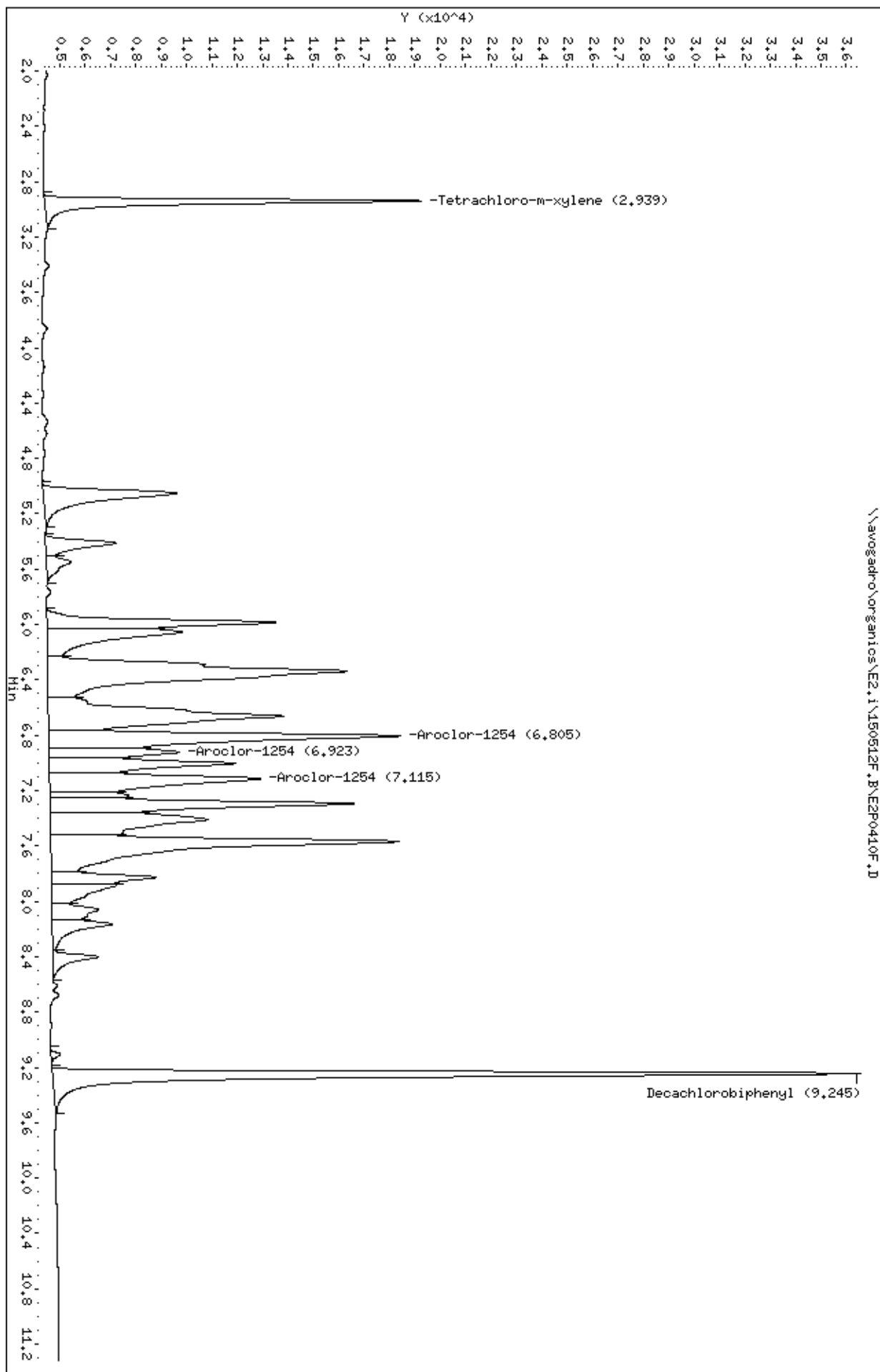
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.939	2.938	0.001	14896 0.02000	0.020		(a)
\$ 11					CAS #: 2051-24-3	
9.244	9.242	0.002	951695 0.04000	0.040		(a)
8					CAS #: 11097-69-1	
6.805	6.801	0.004	13874 0.40000	0.41	80.00- 120.00	100.00(a)
6.922	6.920	0.002	5114 0.40000	0.43	8.67- 48.67	36.86
7.115	7.107	0.008	8315 0.40000	0.43	43.10- 83.10	59.93
Average of Peak Amounts =			0.42333			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0410F.D
Date: 12-May-2015 21:51
Client ID: AR12543E2
Sample Info: AR12543E2,AR12543E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0410R.D
Lab Smp Id: AR12543E2 Client Smp ID: AR12543E2
Inj Date : 12-MAY-2015 21:51
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12543E2,AR12543E2,,ar1254.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
Als bottle: 18 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

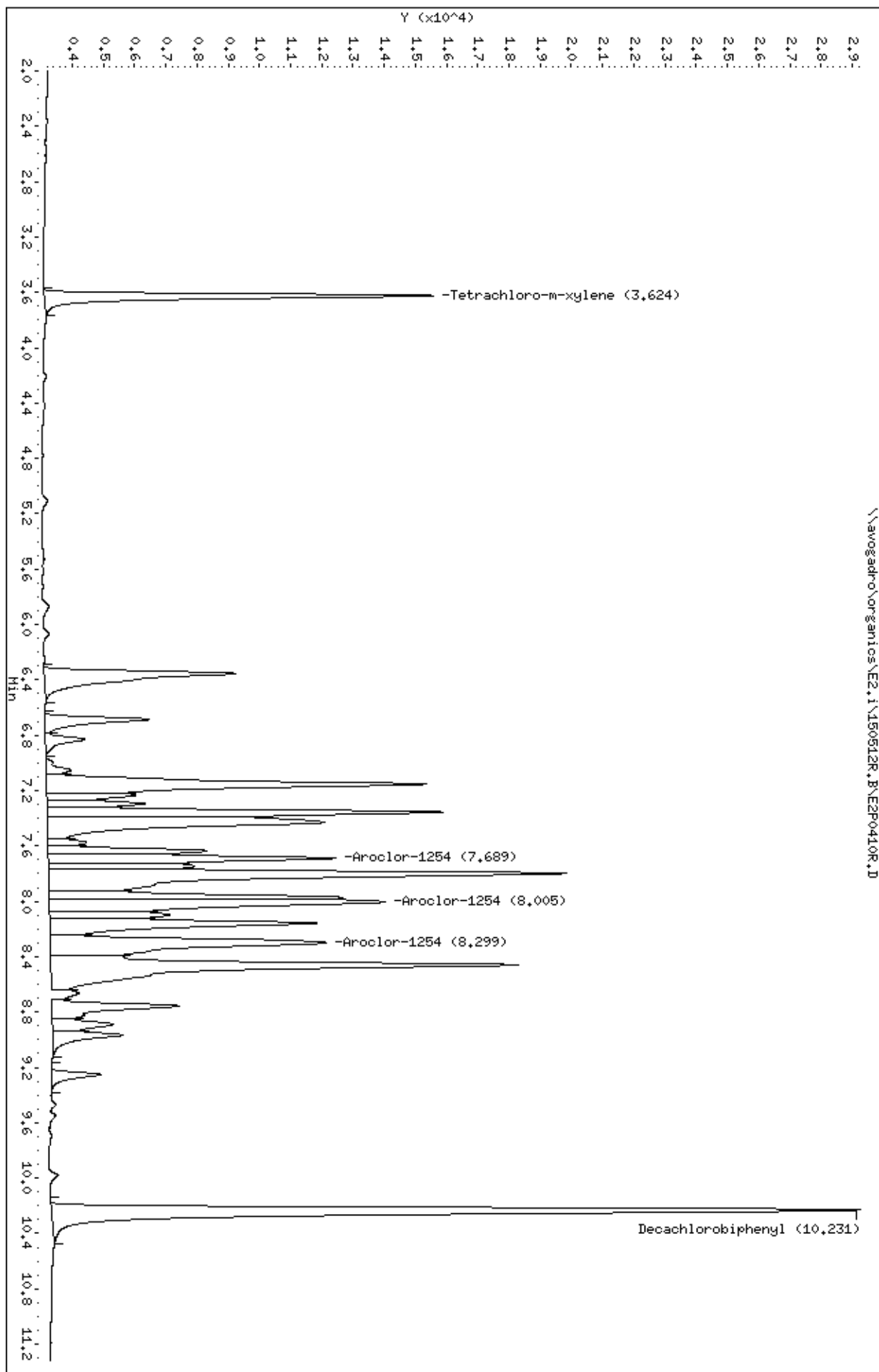
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.624	3.623	0.001	12470 0.02000	0.020		(a)
\$ 11					CAS #: 2051-24-3	
10.231	10.229	0.002	25936 0.04000	0.041		(a)
7					CAS #: 11097-69-1	
7.688	7.685	0.003	9202 0.40000	0.42	80.00- 120.00	100.00(a)
8.004	8.000	0.004	10784 0.40000	0.41	104.84- 144.84	117.19
8.298	8.298	0.000	8852 0.40000	0.42	77.17- 117.17	96.20
Average of Peak Amounts =			0.41667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0410R.D
Date : 12-May-2015 21:51
Client ID: AR12543E2
Sample Info: AR12543E2,AR12543E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0411F.D
Lab Smp Id: AR12544E2 Client Smp ID: AR12544E2
Inj Date : 12-MAY-2015 22:05
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12544E2,AR12544E2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419F.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

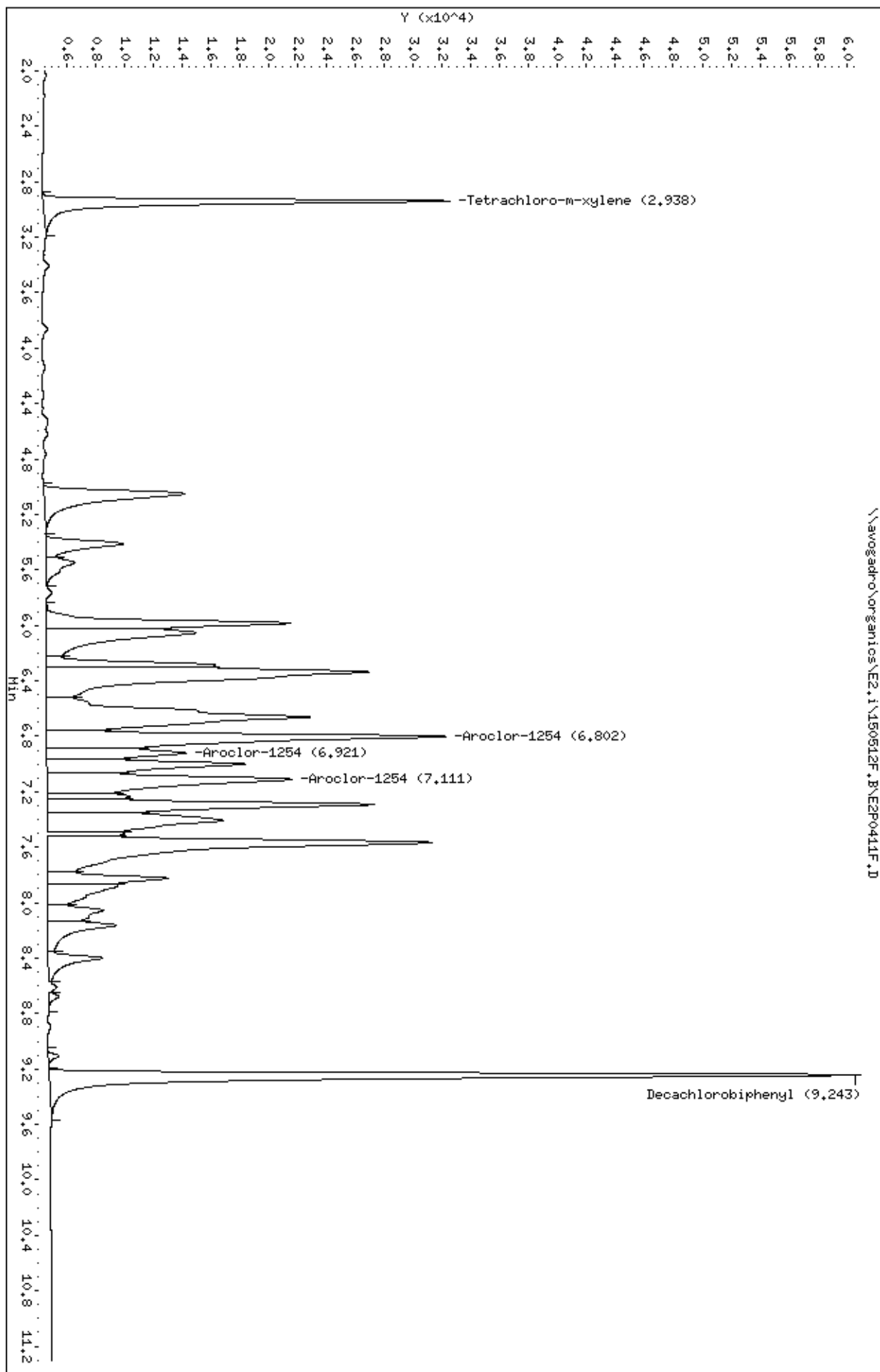
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.938	2.938	0.000	28189 0.04000	0.039		(a)
\$ 11					CAS #: 2051-24-3	
9.243	9.242	0.001	1683992 0.08000	0.072		
8					CAS #: 11097-69-1	
6.802	6.801	0.001	27614 0.80000	0.82	80.00- 120.00	100.00(a)
6.920	6.920	0.000	9610 0.80000	0.80	8.67- 48.67	34.80
7.110	7.107	0.003	16975 0.80000	0.87	43.10- 83.10	61.47
Average of Peak Amounts =			0.83000			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0411F.D
Date: 12-May-2015 22:05
Client ID: AR12544E2
Sample Info: AR12544E2,AR12544E2,,ar1254,sub,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0411R.D
Lab Smp Id: AR12544E2 Client Smp ID: AR12544E2
Inj Date : 12-MAY-2015 22:05
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12544E2,AR12544E2,,ar1254.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419R.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

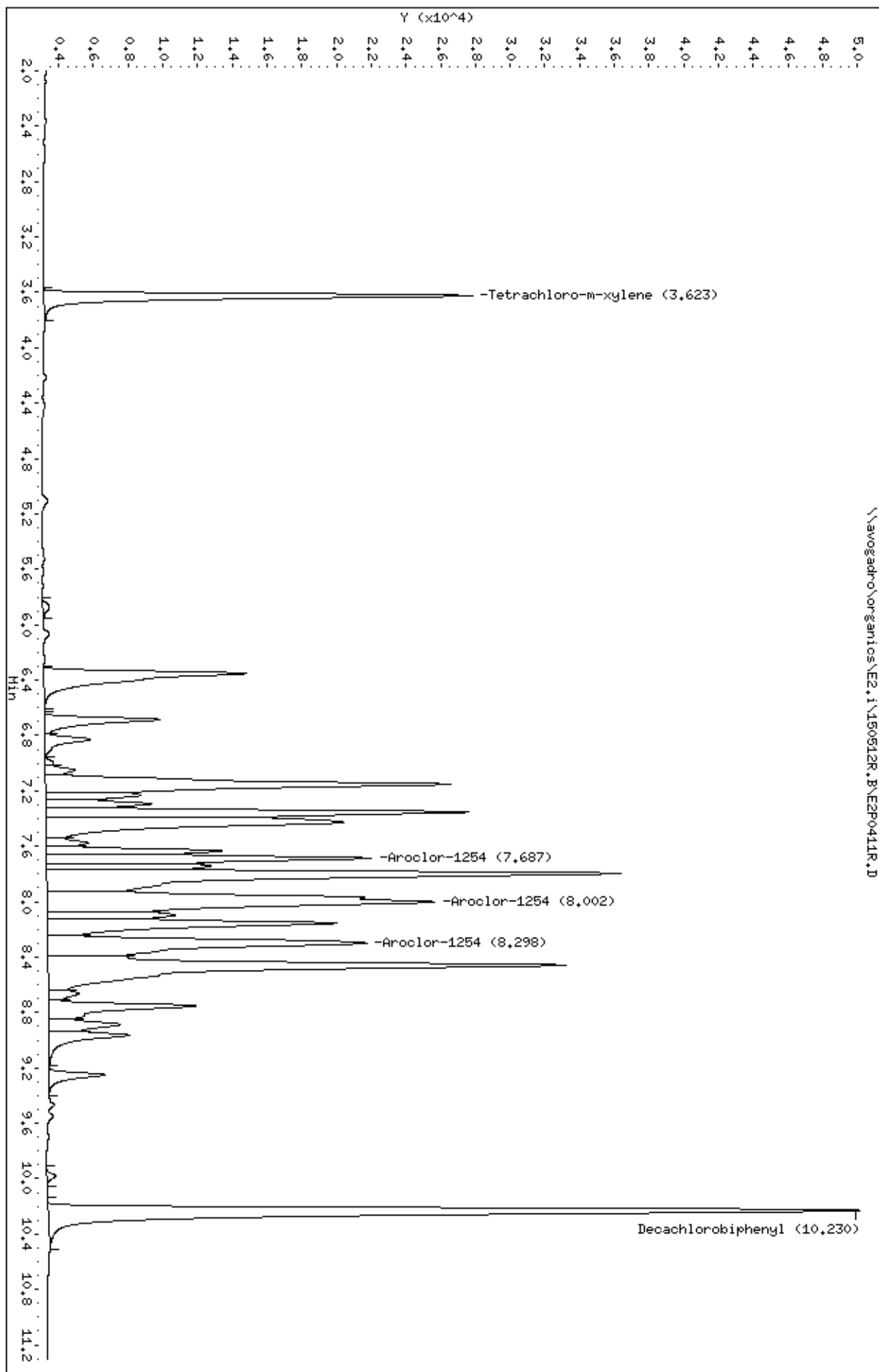
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.623	3.623	0.000	24764 0.04000	0.041		(a)
\$ 11					CAS #: 2051-24-3	
10.229	10.229	0.000	46783 0.08000	0.074		
7					CAS #: 11097-69-1	
7.686	7.685	0.001	18729 0.80000	0.84	80.00- 120.00	100.00(a)
8.001	8.000	0.001	22285 0.80000	0.85	104.84- 144.84	118.99
8.297	8.298	-0.001	18381 0.80000	0.85	77.17- 117.17	98.14
Average of Peak Amounts =			0.84667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0411R.D
Date: 12-May-2015 22:05
Client ID: AR12544E2
Sample Info: AR12544E2,AR12544E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0412F.D
Lab Smp Id: AR12545E2 Client Smp ID: AR12545E2
Inj Date : 12-MAY-2015 22:20
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12545E2,AR12545E2,,ar1254.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

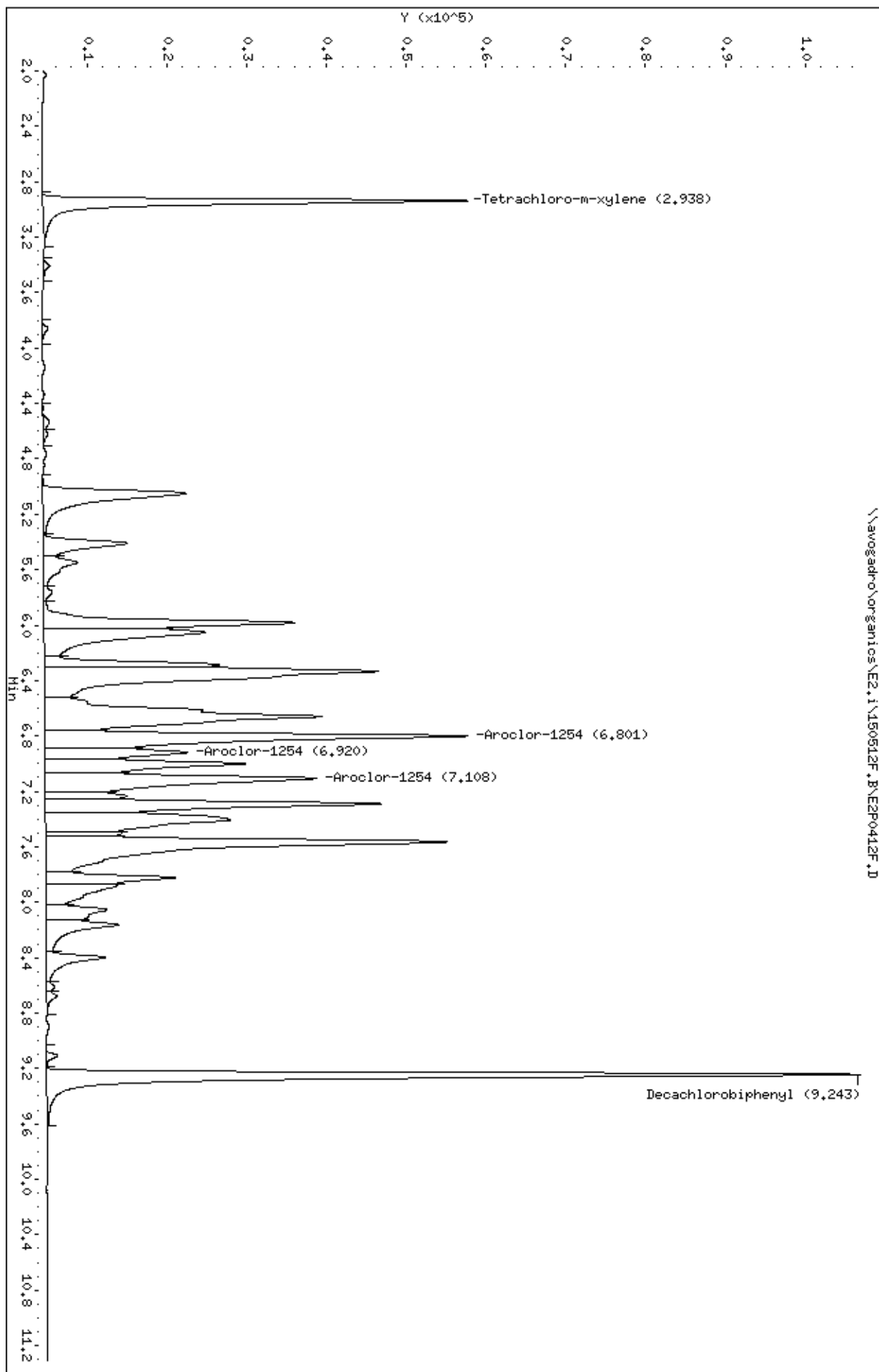
Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.938	2.938	0.000	53295 0.08000	0.073		
\$ 11					CAS #: 2051-24-3	
9.243	9.242	0.001	3033573 0.16000	0.13		
8					CAS #: 11097-69-1	
6.801	6.801	0.000	53053 1.60000	1.6	80.00- 120.00	100.00
6.920	6.920	0.000	17821 1.60000	1.5	8.67- 48.67	33.59
7.107	7.107	0.000	34039 1.60000	1.7	43.10- 83.10	64.16
Average of Peak Amounts =			1.60000			

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0412F.D
Date: 12-May-2015 22:20
Client ID: AR12545E2
Sample Info: AR12545E2,AR12545E2,,ar-1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0412R.D
 Lab Smp Id: AR12545E2 Client Smp ID: AR12545E2
 Inj Date : 12-MAY-2015 22:20
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12545E2,AR12545E2,,ar1254.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
 Als bottle: 20 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

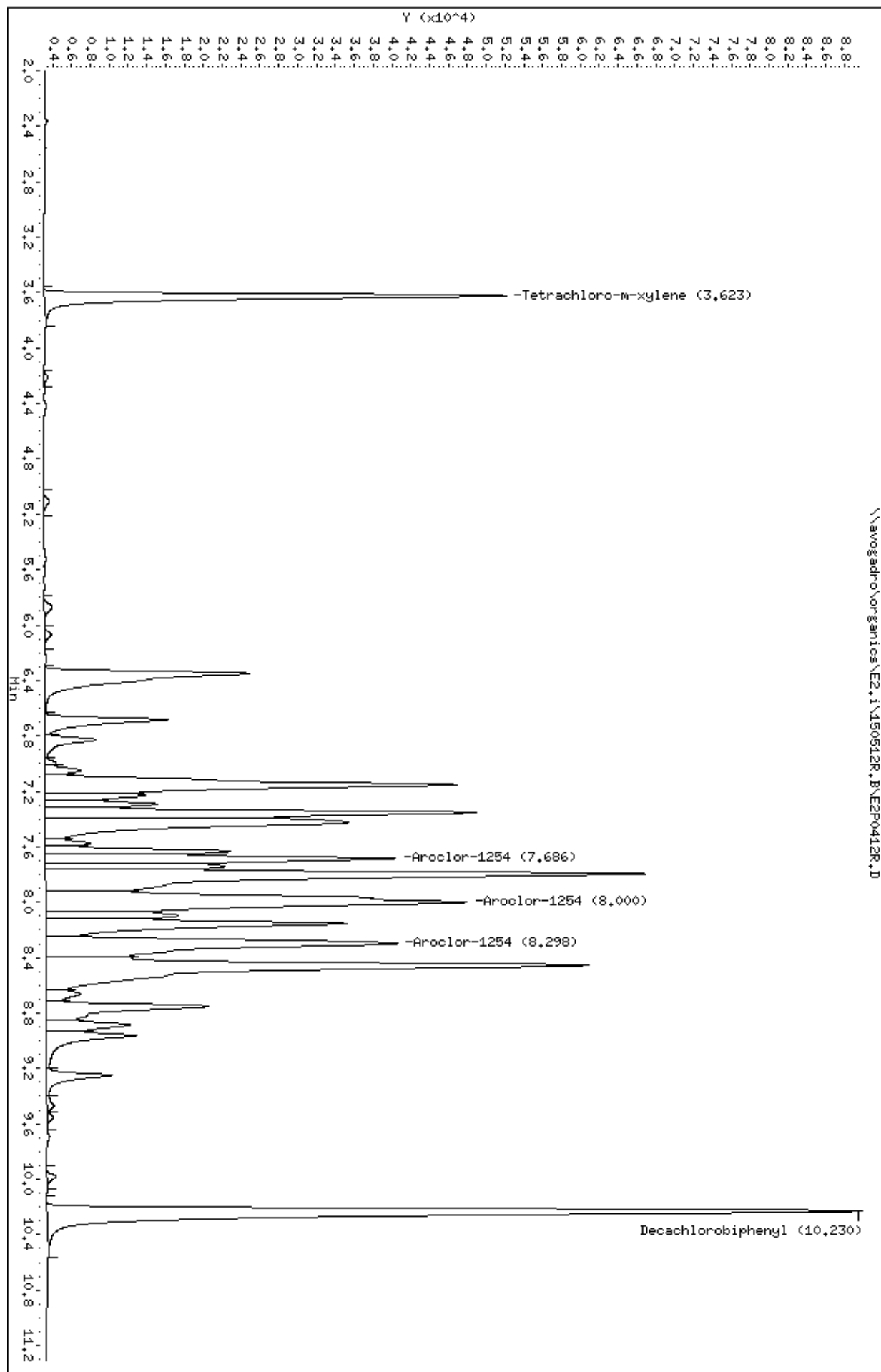
Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.622	3.623	-0.001	49089 0.08000	0.081		
\$ 11					CAS #: 2051-24-3	
10.229	10.229	0.000	86516 0.16000	0.14		
7					CAS #: 11097-69-1	
7.685	7.685	0.000	37069 1.60000	1.6	80.00- 120.00	100.00
8.000	8.000	0.000	44748 1.60000	1.7	104.84- 144.84	120.72
8.298	8.298	0.000	37302 1.60000	1.7	77.17- 117.17	100.63
Average of Peak Amounts =			1.66667			

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0412R.D
Date: 12-May-2015 22:20
Client ID: AR12545E2
Sample Info: AR12545E2,AR12545E2,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0413F.D
 Lab Smp Id: AR12623E2 Client Smp ID: AR12623E2
 Inj Date : 12-MAY-2015 22:35
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12623E2,AR12623E2,,ar1262.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
 Als bottle: 21 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1262.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.939	2.938	0.001	14450	0.02000	0.020			(a)

2 Aroclor-1262					CAS #: 37324-23-5			
8.453	8.453	0.000	21275	0.40000	0.40	80.00-	120.00	100.00
8.685	8.685	0.000	6419	0.40000	0.40	10.17-	50.17	30.17
8.891	8.891	0.000	12806	0.40000	0.40	40.19-	80.19	60.19
Average of Peak Amounts =					0.40000			

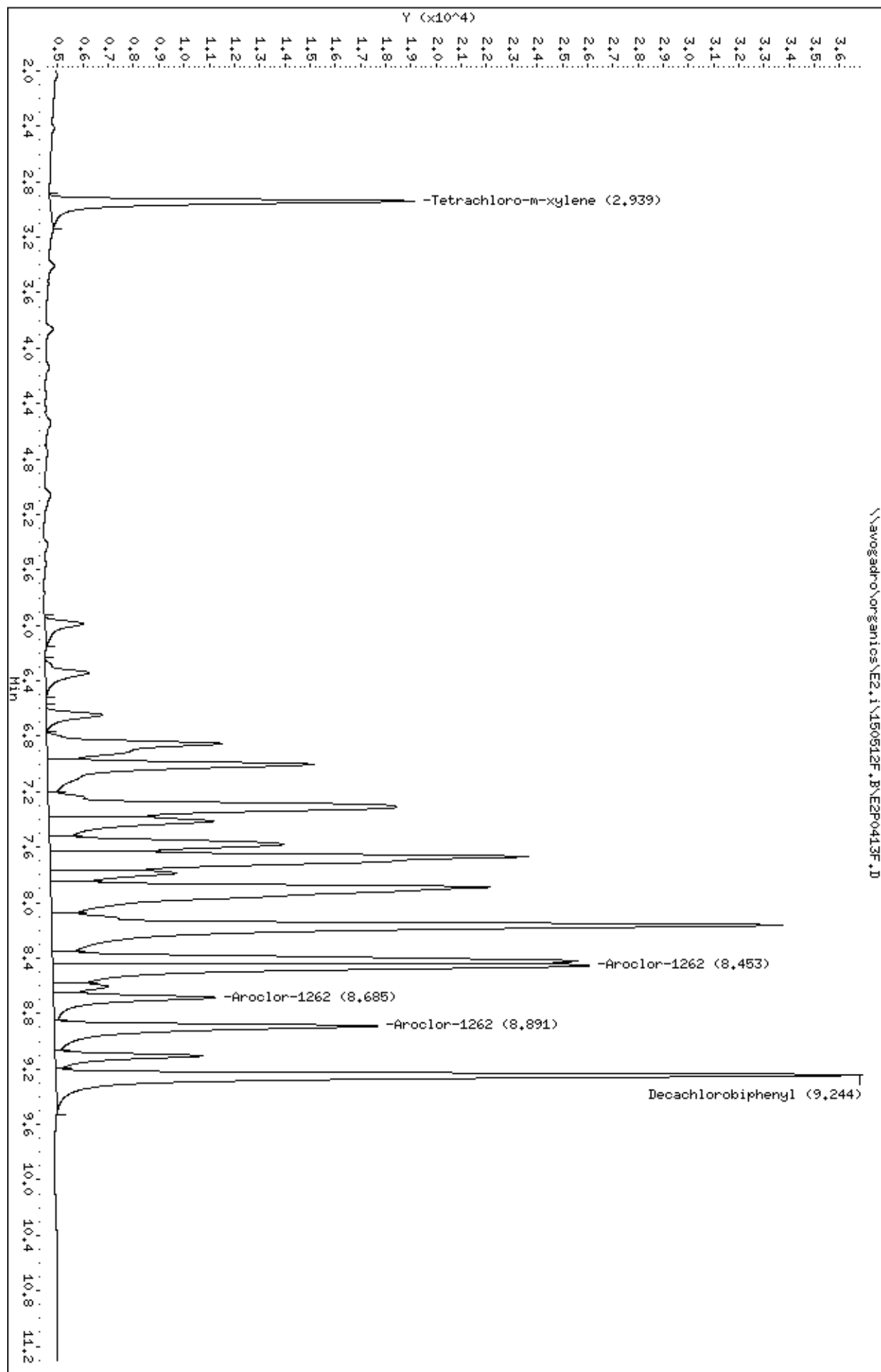
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.243	9.242	0.001	952847	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organicos\E2.i\150512F.B\E2P0413F.D
Date: 12-May-2015 22:35
Client ID: AR12623E2
Sample Info: AR12623E2,AR12623E2,,ar1262,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0413R.D
Lab Smp Id: AR12623E2 Client Smp ID: AR12623E2
Inj Date : 12-MAY-2015 22:35
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12623E2,AR12623E2,,ar1262.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.623	3.623	0.000	12064 0.02000	0.020		(a)

10 Aroclor-1262 CAS #: 37324-23-5						
8.965	8.965	0.000	30317 0.40000	0.40	80.00- 120.00	100.00(a)
9.244	9.244	0.000	22973 0.40000	0.40	55.78- 95.78	75.78
9.693	9.693	0.000	11396 0.40000	0.40	17.59- 57.59	37.59
Average of Peak Amounts =			0.40000			

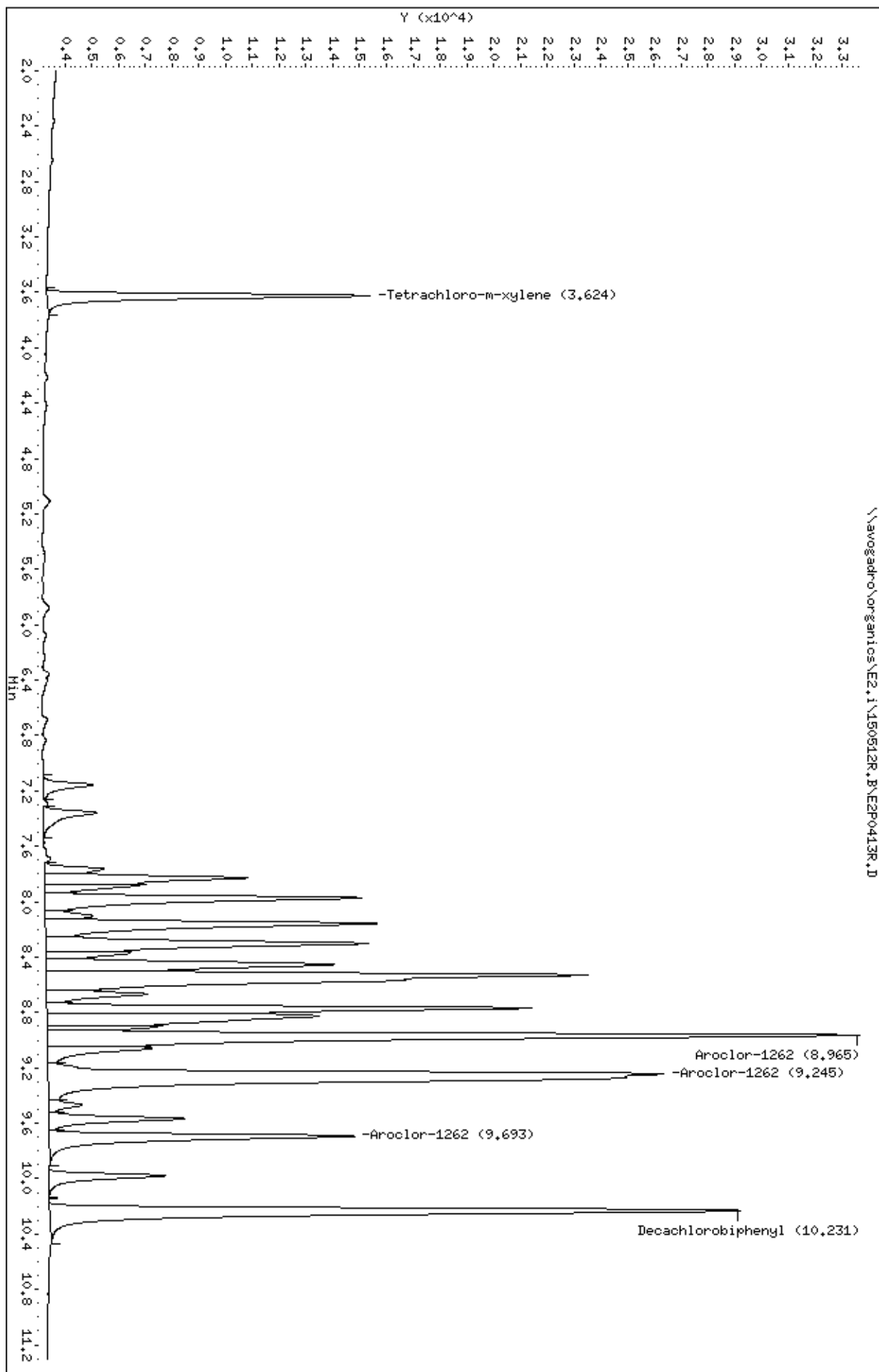
\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.231	10.229	0.002	25802 0.04000	0.041		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0413R.D
Date: 12-May-2015 22:35
Client ID: AR12623E2
Sample Info: AR12623E2,AR12623E2,,ar1262,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0414F.D
 Lab Smp Id: AR12683E2 Client Smp ID: AR12683E2
 Inj Date : 12-MAY-2015 22:49
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12683E2,AR12683E2,,ar1268.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
 Als bottle: 22 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1268.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.939	2.938	0.001	14340	0.02000	0.020			(a)

10 Aroclor-1268					CAS #: 11100-14-4			
8.671	8.671	0.000	13636	0.40000	0.40	80.00- 120.00	100.00	(a)
8.890	8.890	0.000	14282	0.40000	0.40	84.74- 124.74	104.74	
9.103	9.103	0.000	95622	0.40000	0.40	681.25- 721.25	701.25	
Average of Peak Amounts =					0.40000			

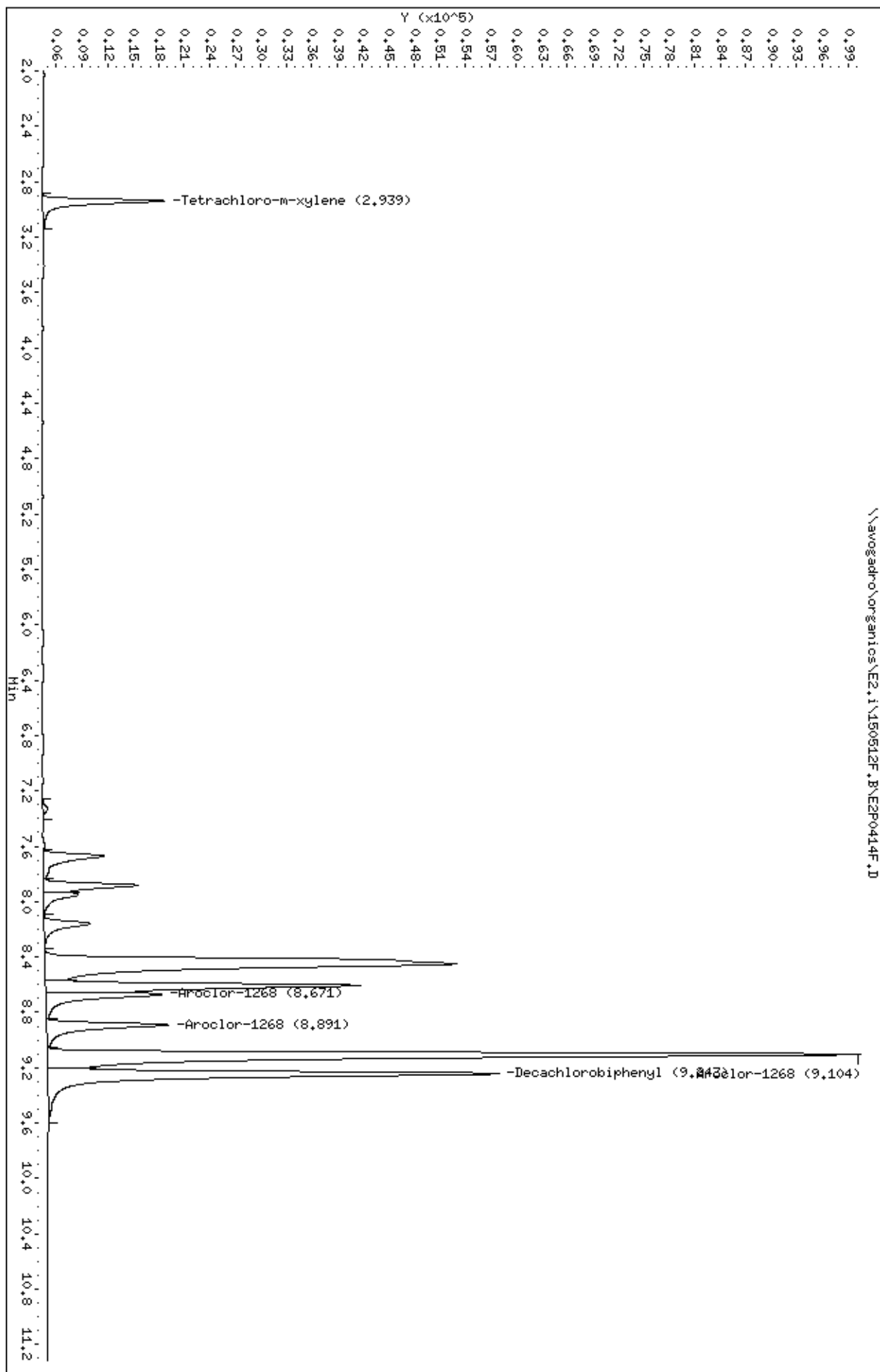
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.243	9.242	0.001	1669168	0.04000	0.062			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0414F.D
Date: 12-May-2015 22:49
Client ID: AR12683E2
Sample Info: AR12683E2,AR12683E2,,ar1268,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0414R.D
 Lab Smp Id: AR12683E2 Client Smp ID: AR12683E2
 Inj Date : 12-MAY-2015 22:49
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12683E2,AR12683E2,,ar1268.sub,,
 Misc Info : 1,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
 Als bottle: 22 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1268.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
\$ 1					CAS #: 877-09-8		
3.623	3.623	0.000	12027 0.02000	0.020		(a)	

9					CAS #: 11100-14-4		
9.238	9.238	0.000	40152 0.40000	0.40	80.00- 120.00	100.00(a)	
9.465	9.465	0.000	32760 0.40000	0.40	61.59- 101.59	81.59	
9.977	9.977	0.000	83338 0.40000	0.40	187.56- 227.56	207.56	
Average of Peak Amounts =			0.40000				

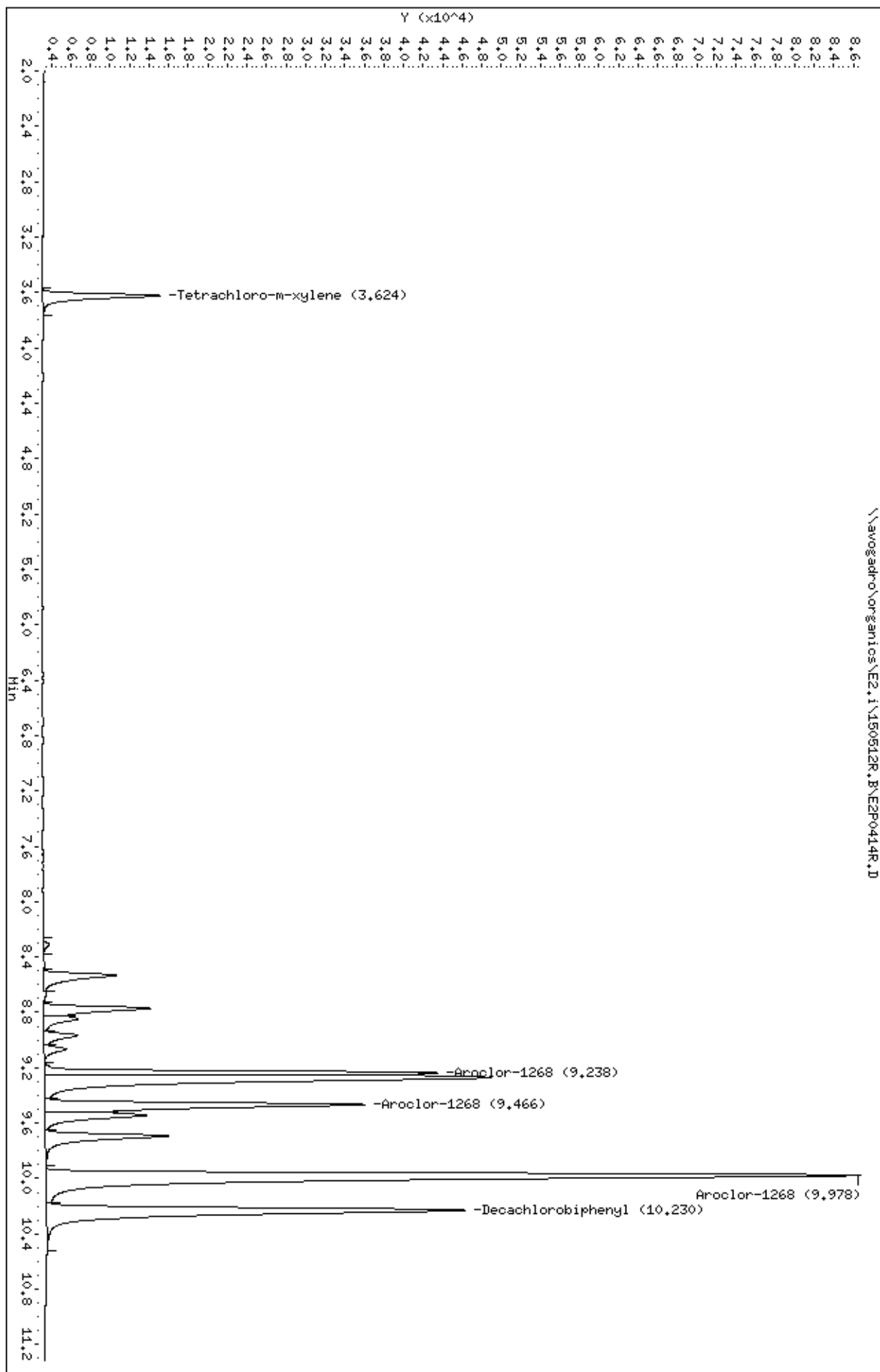
\$ 11					CAS #: 2051-24-3		
10.230	10.229	0.001	42781 0.04000	0.060			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0414R.D
Date: 12-May-2015 22:49
Client ID: AR12683E2
Sample Info: AR12683E2,AR12683E2,,ar1268,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0415F.D
 Lab Smp Id: AR16601E2 Client Smp ID: AR16601E2
 Inj Date : 12-MAY-2015 23:04
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16601E2,AR16601E2,,ar1660.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415F.D
 Als bottle: 23 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.939	2.938	0.001	3823 0.00500	0.0053		(a)	

5 Aroclor-1016				CAS #: 12674-11-2			
3.860	3.857	0.003	2623 0.10000	0.12	80.00- 120.00	100.00(a)	
4.540	4.536	0.004	2553 0.10000	0.10	103.49- 143.49	97.33	
5.556	5.552	0.004	845 0.10000	0.099	19.19- 59.19	32.22	
Average of Peak Amounts =				0.10633			

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.245	9.242	0.003	274518 0.01000	0.010		(a)	

9 Aroclor-1260				CAS #: 11096-82-5			
7.300	7.290	0.010	4973 0.10000	0.11	80.00- 120.00	100.00(a)	
7.574	7.563	0.011	4134 0.10000	0.11	64.59- 104.59	83.13	
8.166	8.159	0.007	6204 0.10000	0.11	100.16- 140.16	124.75	
Average of Peak Amounts =				0.11000			

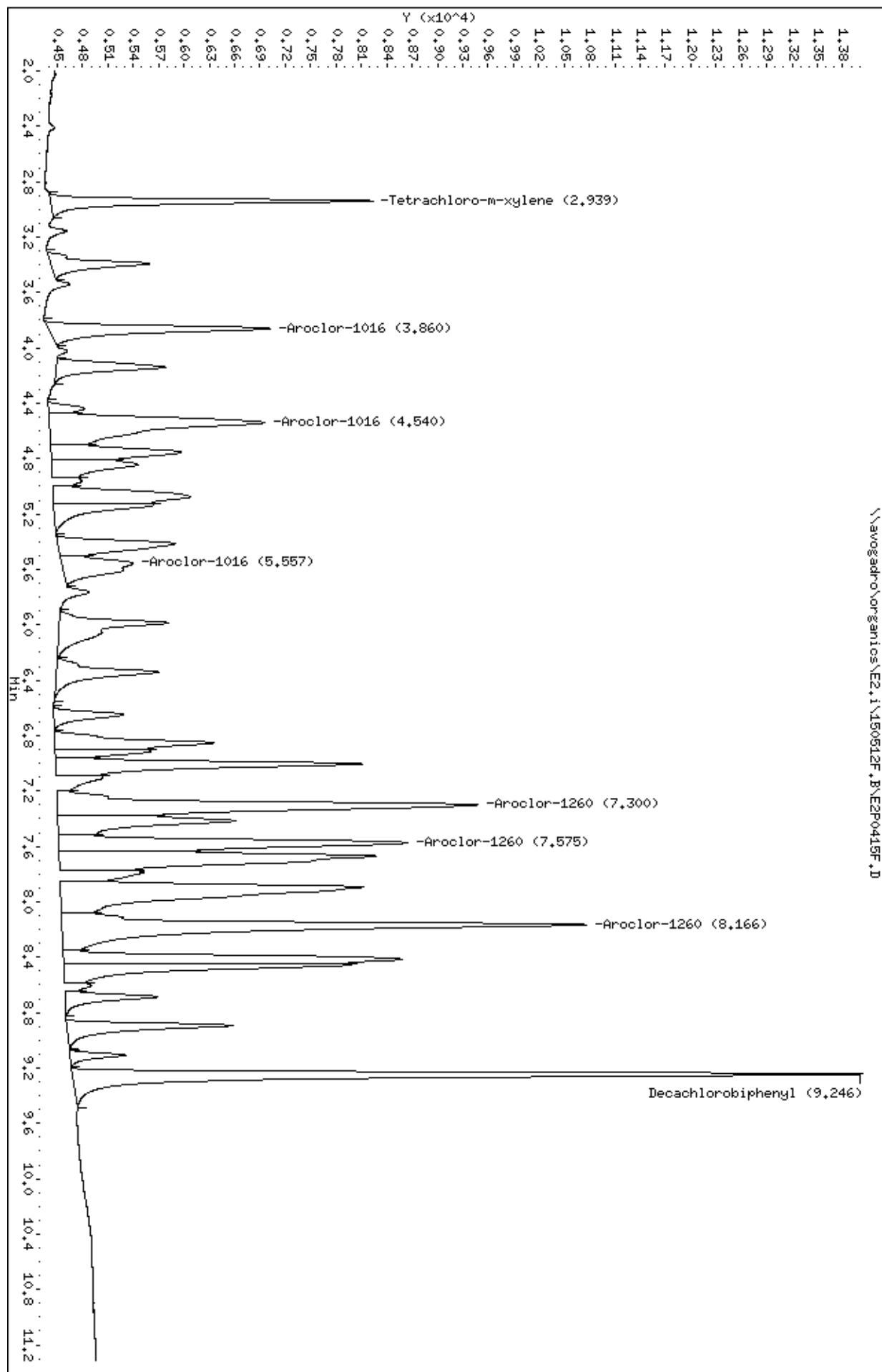
Data File: \\avogadro\organics\E2.i\150512F.B\E2P0415F.D
Report Date: 13-May-2015 17:29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P041SF.D
 Date: 12-May-2015 23:04
 Client ID: AR16601E2
 Sample Info: AR16601E2,AR16601E2,,ar1660,sdb,,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0415R.D
 Lab Smp Id: AR16601E2 Client Smp ID: AR16601E2
 Inj Date : 12-MAY-2015 23:04
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16601E2,AR16601E2,,ar1660.sub,,
 Misc Info : 1,1,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:04 Cal File: E2P0415R.D
 Als bottle: 23 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE	(ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.624	3.623	0.001	2853	0.00500	0.0048			(a)

6 Aroclor-1016					CAS #: 12674-11-2			
5.104	5.101	0.003	2232	0.10000	0.11	80.00-	120.00	100.00(a)
5.875	5.871	0.004	2580	0.10000	0.095	133.48-	173.48	115.59
6.685	6.682	0.003	1674	0.10000	0.10	67.22-	107.22	75.00
Average of Peak Amounts =					0.10167			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.232	10.229	0.003	7172	0.01000	0.0100			(a)

8 Aroclor-1260					CAS #: 11096-82-5			
7.974	7.969	0.005	3908	0.10000	0.11	80.00-	120.00	100.00(a)
8.459	8.454	0.005	4447	0.10000	0.11	103.05-	143.05	113.79
8.968	8.962	0.006	6212	0.10000	0.10	143.47-	183.47	158.96
Average of Peak Amounts =					0.10667			

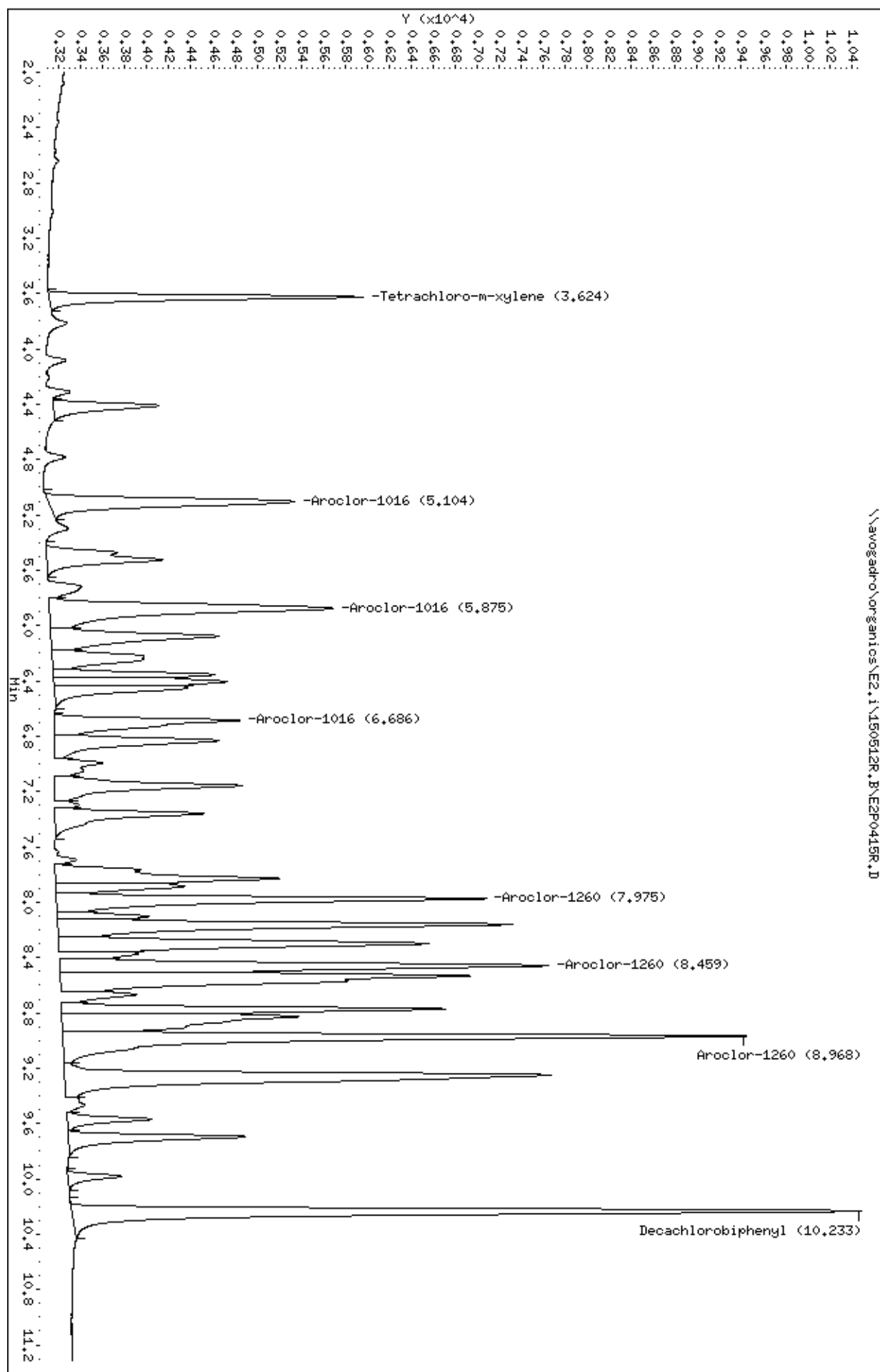
Data File: \\avogadro\organics\E2.i\150512R.B\E2P0415R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0415R.D
Date: 12-May-2015 23:04
Client ID: AR16601E2
Sample Info: AR16601E2,AR16601E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0416F.D
 Lab Smp Id: AR16606E2 Client Smp ID: AR16606E2
 Inj Date : 12-MAY-2015 23:19
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16606E2,AR16606E2,,ar1660.sub,,
 Misc Info : 1,6,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:19 Cal File: E2P0416F.D
 Als bottle: 24 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.939	2.938	0.001	1960	0.00000	0.0027			(a)

5 Aroclor-1016					CAS #: 12674-11-2			
3.860	3.857	0.003	1430	0.05000	0.060	80.00-	120.00	100.00(a)
4.541	4.536	0.005	1187	0.05000	0.047	103.49-	143.49	83.01
5.558	5.552	0.006	432	0.05000	0.050	19.19-	59.19	30.21
Average of Peak Amounts =					0.05233			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.246	9.242	0.004	148088	0.00000	0.0055			(a)

9 Aroclor-1260					CAS #: 11096-82-5			
7.303	7.290	0.013	2639	0.05000	0.057	80.00-	120.00	100.00(a)
7.577	7.563	0.014	2165	0.05000	0.055	64.59-	104.59	82.04
8.168	8.159	0.009	3236	0.05000	0.054	100.16-	140.16	122.62
Average of Peak Amounts =					0.05533			

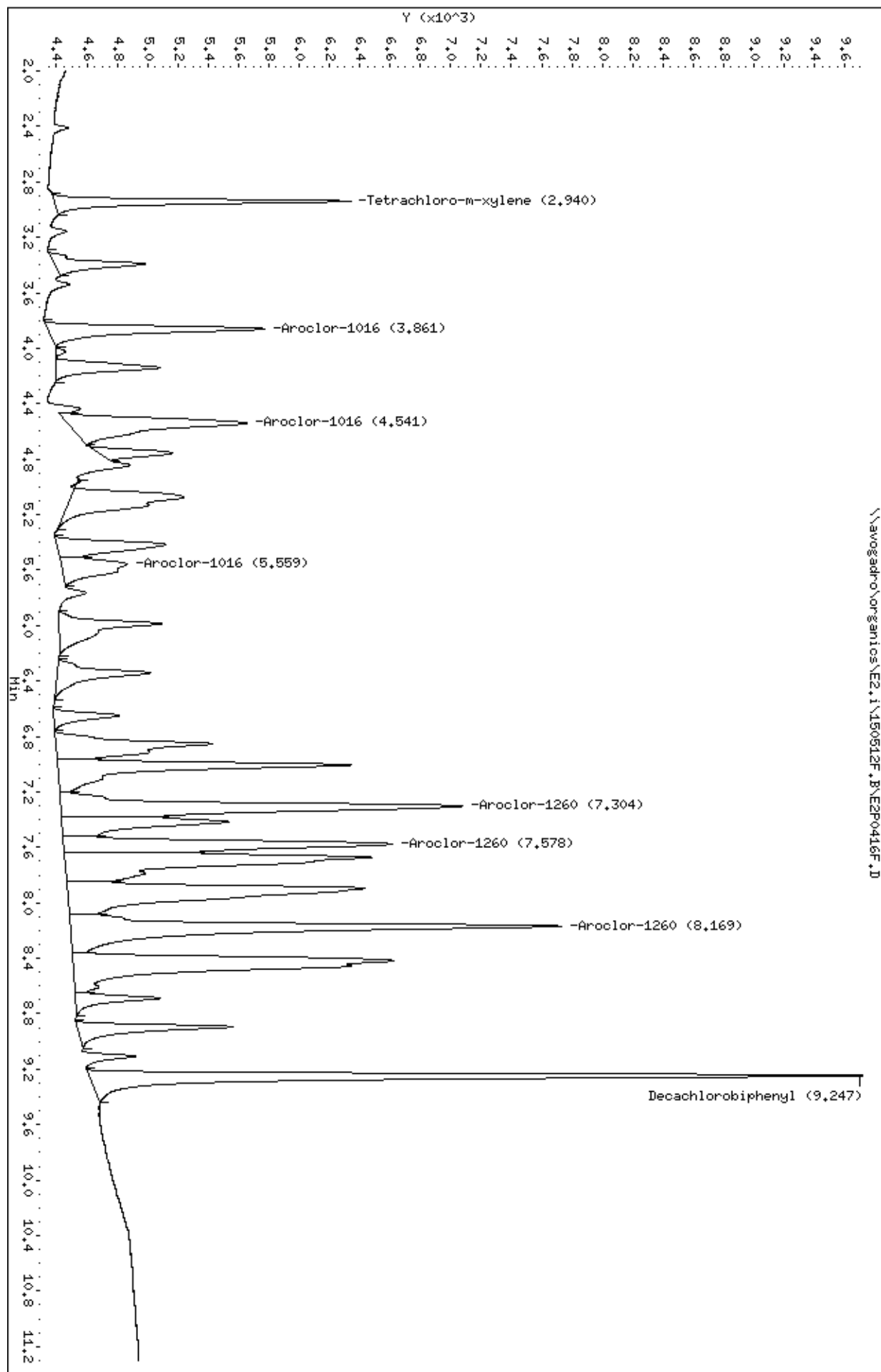
Data File: \\avogadro\organics\E2.i\150512F.B\E2P0416F.D
Report Date: 13-May-2015 17:29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0416F.D
Date: 12-May-2015 23:19
Client ID: AR16606E2
Sample Info: AR16606E2,AR16606E2,,ar1660,sdk,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0416R.D
 Lab Smp Id: AR16606E2 Client Smp ID: AR16606E2
 Inj Date : 12-MAY-2015 23:19
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16606E2,AR16606E2,,ar1660.sub,,
 Misc Info : 1,6,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:19 Cal File: E2P0416R.D
 Als bottle: 24 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.624	3.623	0.001	1420 0.00000	0.0024		(a)

6	Aroclor-1016		CAS #: 12674-11-2			
5.104	5.101	0.003	1210 0.05000	0.059	80.00- 120.00	100.00(a)
5.875	5.871	0.004	1271 0.05000	0.047	133.48- 173.48	105.04
6.686	6.682	0.004	847 0.05000	0.052	67.22- 107.22	70.00
Average of Peak Amounts =			0.05267			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.233	10.229	0.004	3777 0.00000	0.0053		(a)

8	Aroclor-1260		CAS #: 11096-82-5			
7.976	7.969	0.007	2050 0.05000	0.056	80.00- 120.00	100.00(a)
8.461	8.454	0.007	2259 0.05000	0.054	103.05- 143.05	110.20
8.969	8.962	0.007	3139 0.05000	0.053	143.47- 183.47	153.12
Average of Peak Amounts =			0.05433			

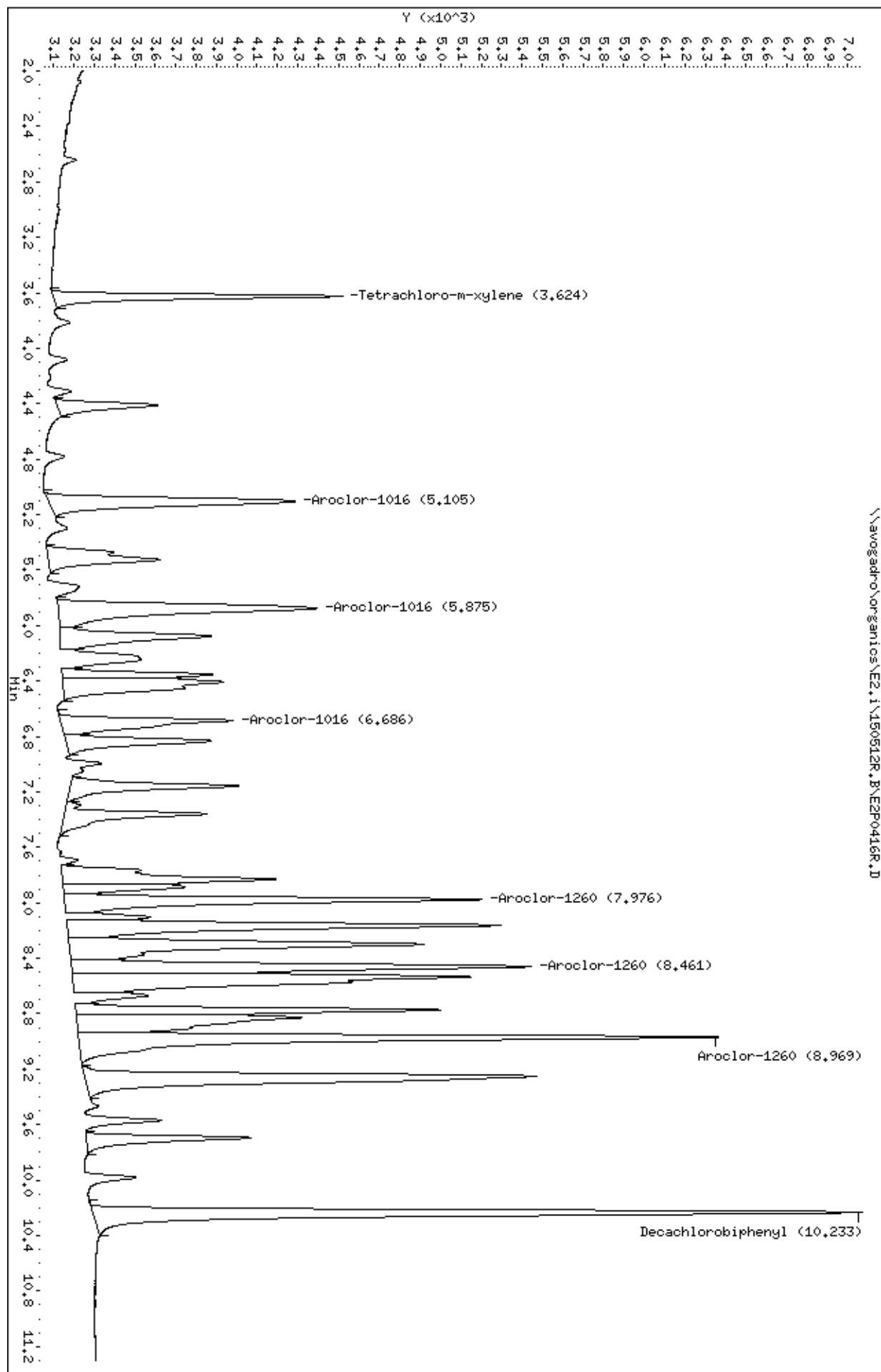
Data File: \\avogadro\organics\E2.i\150512R.B\E2P0416R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0416R.D
Date: 12-May-2015 23:19
Client ID: AR16606E2
Sample Info: AR16606E2,AR16606E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLP-PestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0417F.D
 Lab Smp Id: AR16602E2 Client Smp ID: AR16602E2
 Inj Date : 12-MAY-2015 23:34
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16602E2,AR16602E2,,ar1660.sub,,
 Misc Info : 1,2,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417F.D
 Als bottle: 25 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS									
			CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
2.939	2.938	0.001	7610	0.01000	0.010			(a)	

5 Aroclor-1016					CAS #: 12674-11-2				
3.859	3.857	0.002	5012	0.20000	0.21	80.00-	120.00	100.00(a)	
4.540	4.536	0.004	5150	0.20000	0.20	103.49-	143.49	102.75	
5.556	5.552	0.004	1943	0.20000	0.22	19.19-	59.19	38.77	
Average of Peak Amounts =					0.21000				

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3				
9.244	9.242	0.002	508877	0.02000	0.019			(a)	

9 Aroclor-1260					CAS #: 11096-82-5				
7.298	7.290	0.008	9549	0.20000	0.20	80.00-	120.00	100.00(a)	
7.573	7.563	0.010	8075	0.20000	0.20	64.59-	104.59	84.56	
8.165	8.159	0.006	12190	0.20000	0.20	100.16-	140.16	127.66	
Average of Peak Amounts =					0.20000				

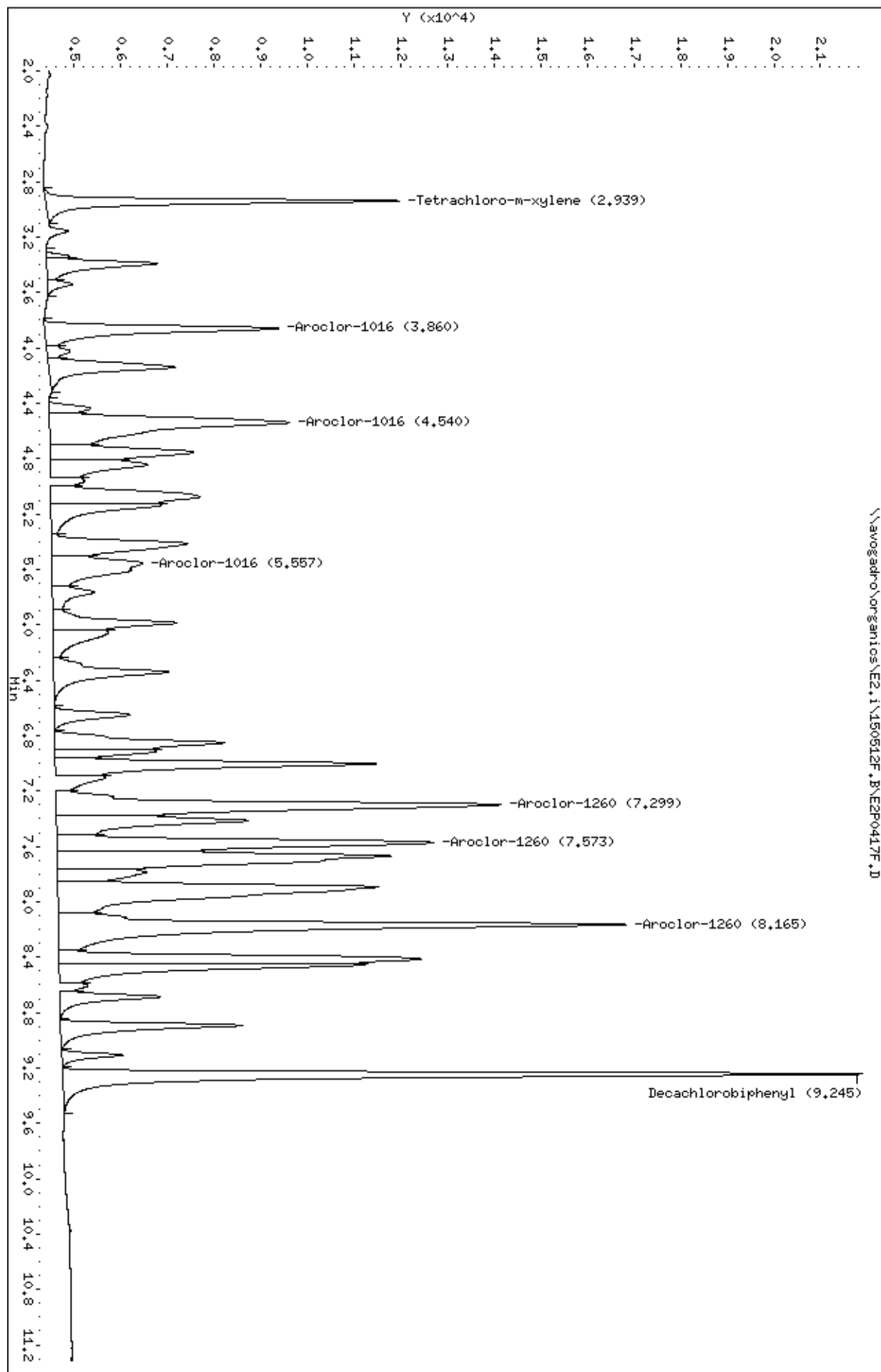
Data File: \\avogadro\organics\E2.i\150512F.B\E2P0417F.D
Report Date: 13-May-2015 17:29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0417F.D
Date: 12-May-2015 23:34
Client ID: AR16602E2
Sample Info: AR16602E2,AR16602E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0417R.D
Lab Smp Id: AR16602E2 Client Smp ID: AR16602E2
Inj Date : 12-MAY-2015 23:34
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16602E2,AR16602E2,,ar1660.sub,,
Misc Info : 1,2,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:34 Cal File: E2P0417R.D
Als bottle: 25 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.624	3.623	0.001	5918 0.01000	0.0099		(a)

6	Aroclor-1016		CAS #: 12674-11-2			
5.104	5.101	0.003	4245 0.20000	0.21 80.00- 120.00	100.00(a)	
5.874	5.871	0.003	5349 0.20000	0.20 133.48- 173.48	126.01	
6.685	6.682	0.003	3357 0.20000	0.20 67.22- 107.22	79.08	
Average of Peak Amounts =			0.20333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.232	10.229	0.003	13665 0.02000	0.019		(a)

8	Aroclor-1260		CAS #: 11096-82-5			
7.973	7.969	0.004	7637 0.20000	0.21 80.00- 120.00	100.00(a)	
8.458	8.454	0.004	9020 0.20000	0.20 103.05- 143.05	118.11	
8.966	8.962	0.004	12658 0.20000	0.21 143.47- 183.47	165.75	
Average of Peak Amounts =			0.20667			

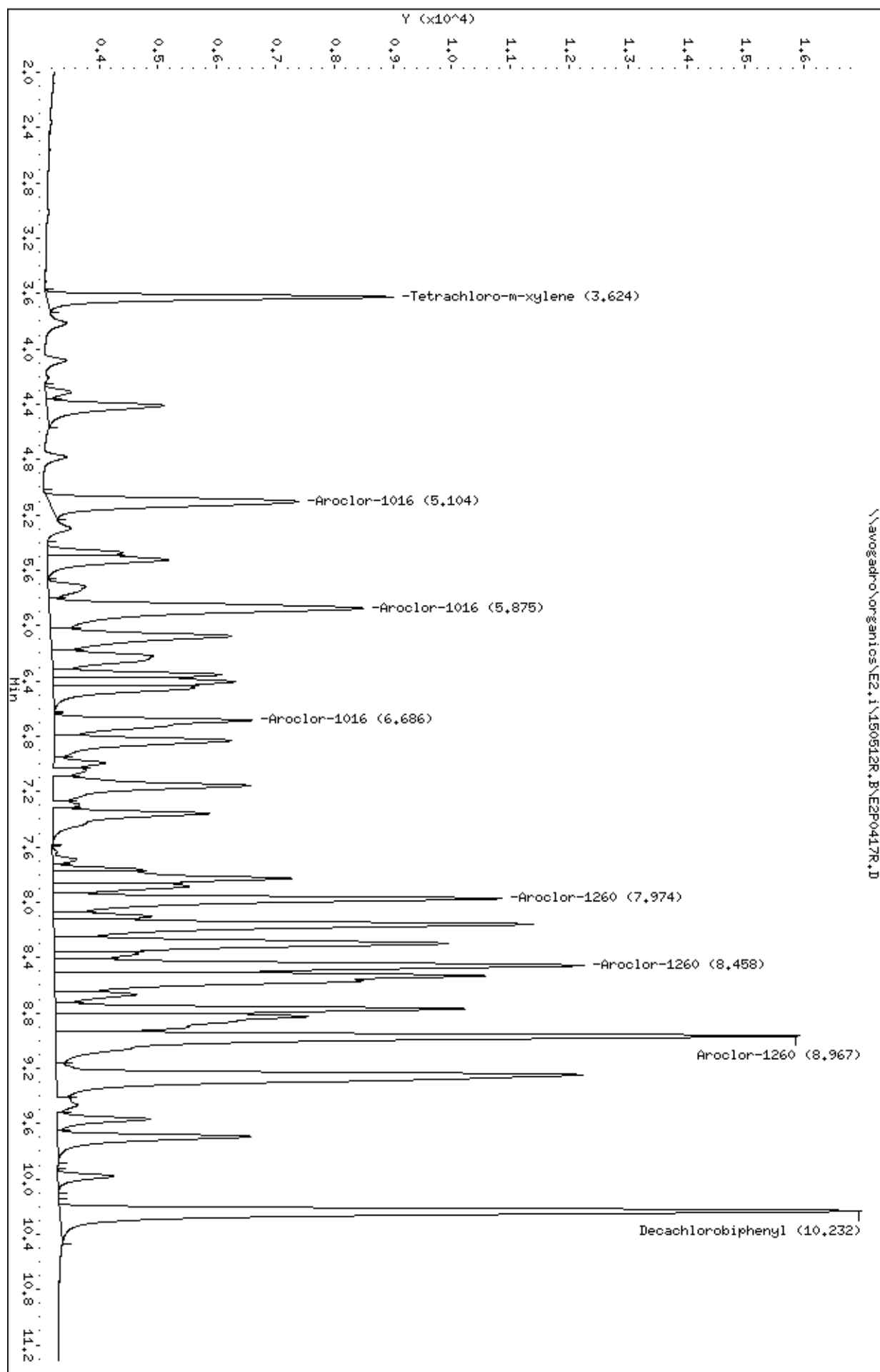
Data File: \\avogadro\organics\E2.i\150512R.B\E2P0417R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0417R.D
Date: 12-May-2015 23:34
Client ID: AR16602E2
Sample Info: AR16602E2,AR16602E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0418F.D
Lab Smp Id: AR16603E2 Client Smp ID: AR16603E2
Inj Date : 12-MAY-2015 23:48
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603E2,AR16603E2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418F.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
2.939	2.938	0.001	15575 0.02000	0.021		(a)

5 Aroclor-1016 CAS #: 12674-11-2						
3.858	3.857	0.001	9538 0.40000	0.40	80.00- 120.00	100.00(a)
4.538	4.536	0.002	10675 0.40000	0.42	103.49- 143.49	111.92
5.555	5.552	0.003	4120 0.40000	0.46	19.19- 59.19	43.20
Average of Peak Amounts =			0.42667			

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
9.243	9.242	0.001	989276 0.04000	0.042		(a)

9 Aroclor-1260 CAS #: 11096-82-5						
7.295	7.290	0.005	19181 0.40000	0.41	80.00- 120.00	100.00(a)
7.568	7.563	0.005	16653 0.40000	0.41	64.59- 104.59	86.82
8.162	8.159	0.003	25079 0.40000	0.42	100.16- 140.16	130.75
Average of Peak Amounts =			0.41333			

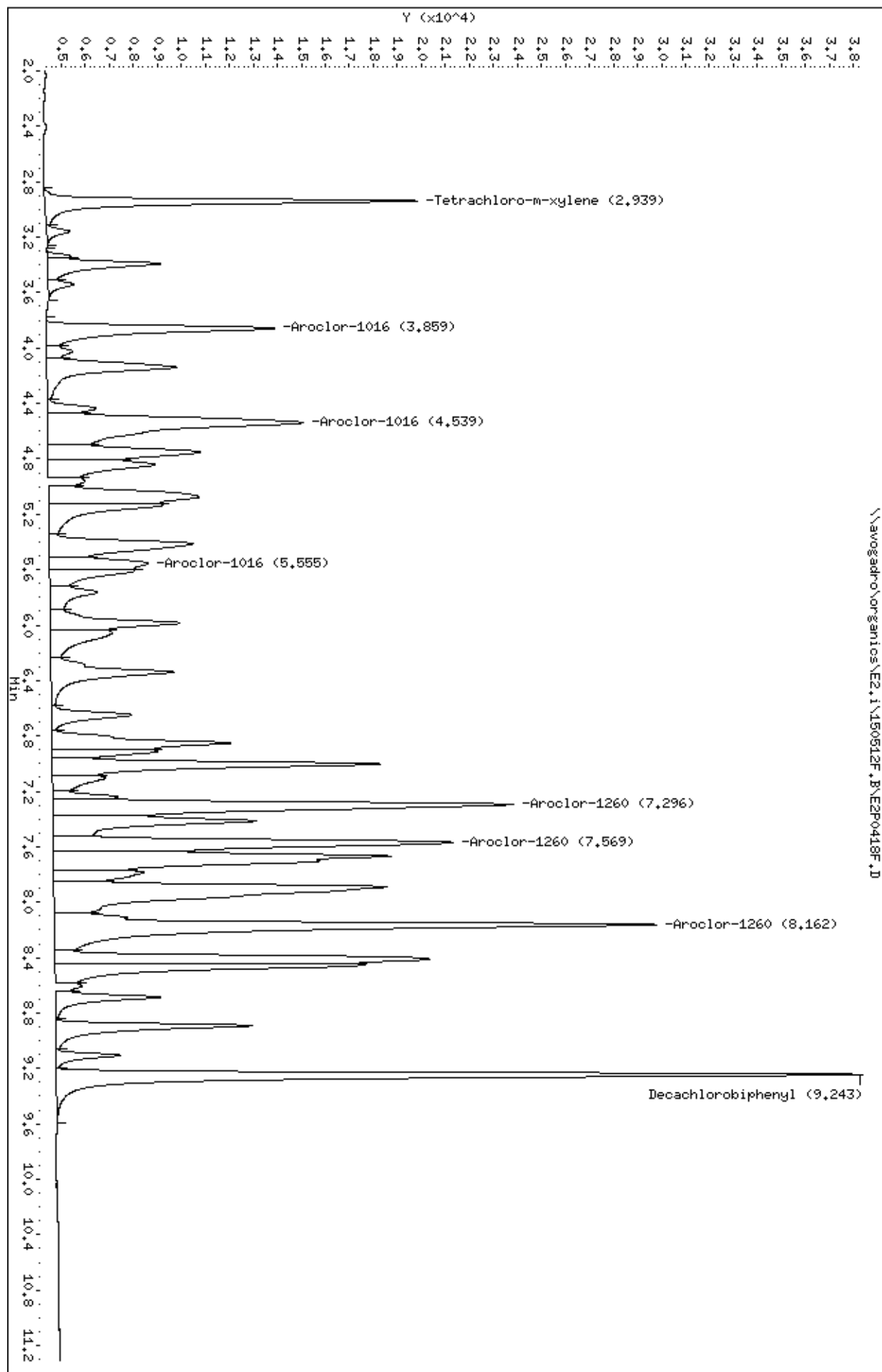
Data File: \\avogadro\organics\E2.i\150512F.B\E2P0418F.D
Report Date: 13-May-2015 17:29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0418F.D
Date: 12-May-2015 23:48
Client ID: AR16603E2
Sample Info: AR16603E2,AR16603E2,,ar1660,sdk,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0418R.D
Lab Smp Id: AR16603E2 Client Smp ID: AR16603E2
Inj Date : 12-MAY-2015 23:48
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603E2,AR16603E2,,ar1660.sub,,
Misc Info : 1,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 12-MAY-2015 23:48 Cal File: E2P0418R.D
Als bottle: 26 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	12901 0.02000	0.021		(a)

6	Aroclor-1016		CAS #: 12674-11-2			
5.103	5.101	0.002	8360 0.40000	0.40	80.00- 120.00	100.00(a)
5.874	5.871	0.003	11430 0.40000	0.42	133.48- 173.48	136.72
6.685	6.682	0.003	7057 0.40000	0.42	67.22- 107.22	84.41
Average of Peak Amounts =			0.41333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.230	10.229	0.001	27235 0.04000	0.042		(a)

8	Aroclor-1260		CAS #: 11096-82-5			
7.972	7.969	0.003	15349 0.40000	0.41	80.00- 120.00	100.00(a)
8.457	8.454	0.003	19001 0.40000	0.42	103.05- 143.05	123.79
8.965	8.962	0.003	26483 0.40000	0.42	143.47- 183.47	172.54
Average of Peak Amounts =			0.41667			

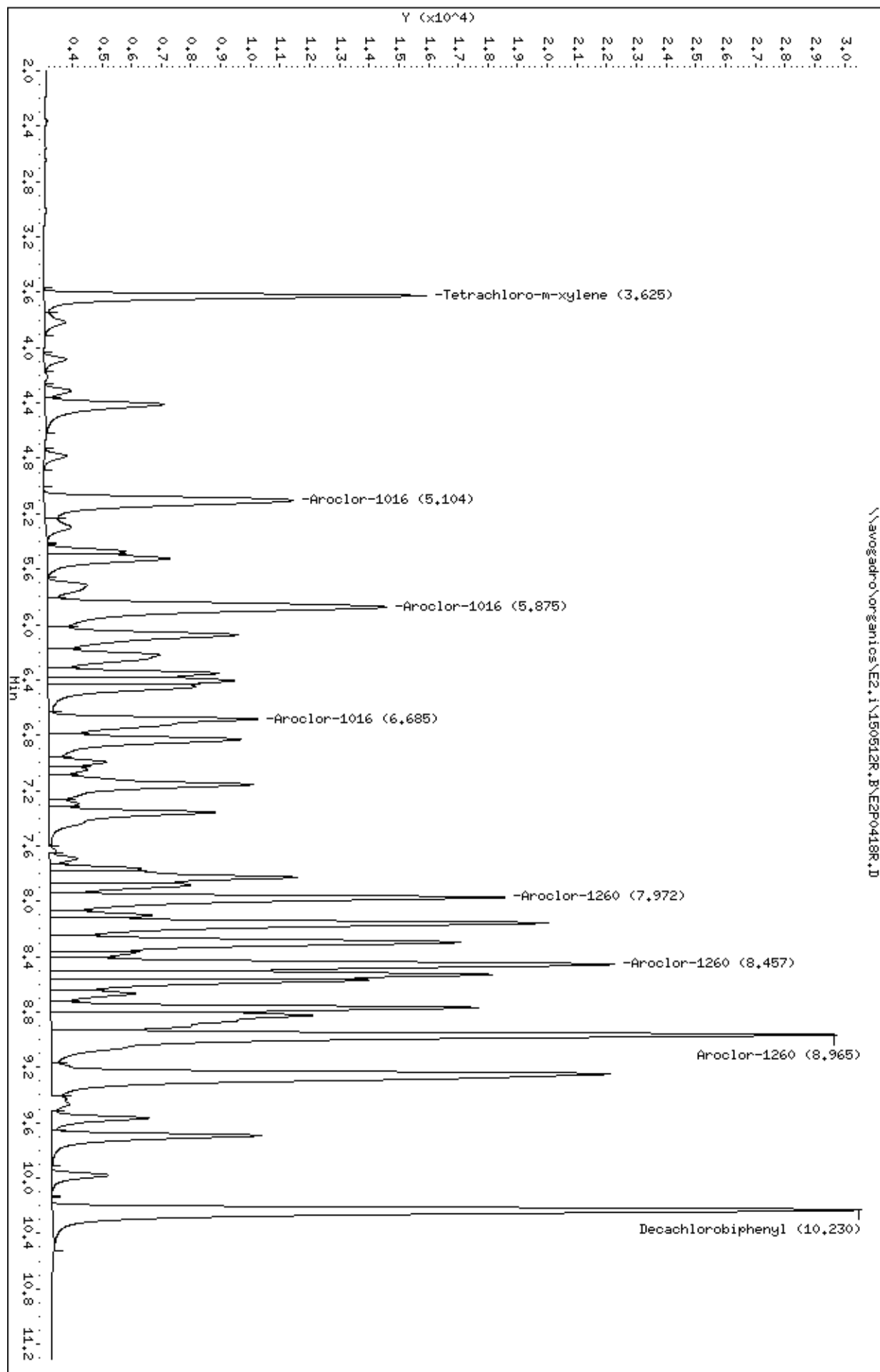
Data File: \\avogadro\organics\E2.i\150512R.B\E2P0418R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0418R.D
 Date: 12-May-2015 23:48
 Client ID: AR16603E2
 Sample Info: AR16603E2,AR16603E2,,ar1660,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0419F.D
Lab Smp Id: AR16604E2 Client Smp ID: AR16604E2
Inj Date : 13-MAY-2015 00:03
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16604E2,AR16604E2,,ar1660.sub,,
Misc Info : 1,4,,1
Comment :
Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419F.D
Als bottle: 27 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.939	2.938	0.001	28556 0.04000	0.039		(a)

5	Aroclor-1016		CAS #: 12674-11-2			
3.858	3.857	0.001	16922 0.80000	0.70	80.00- 120.00	100.00(a)
4.538	4.536	0.002	20521 0.80000	0.81	103.49- 143.49	121.27
5.555	5.552	0.003	7766 0.80000	0.84	19.19- 59.19	45.89
Average of Peak Amounts =			0.78333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.244	9.242	0.002	1703441 0.08000	0.072		

9	Aroclor-1260		CAS #: 11096-82-5			
7.294	7.290	0.004	34601 0.80000	0.74	80.00- 120.00	100.00(a)
7.567	7.563	0.004	30824 0.80000	0.76	64.59- 104.59	89.08
8.162	8.159	0.003	45965 0.80000	0.76	100.16- 140.16	132.84
Average of Peak Amounts =			0.75333			

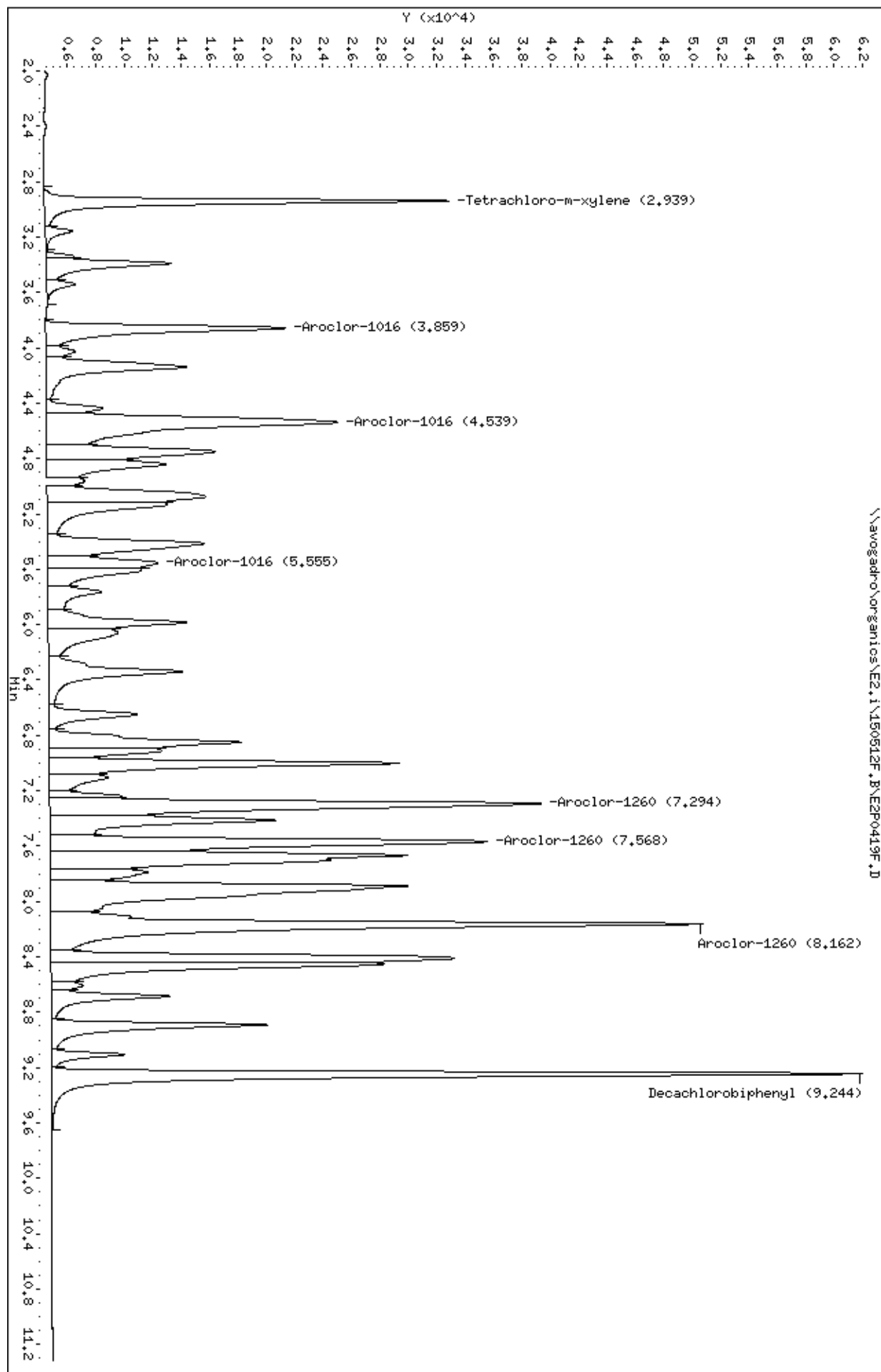
Data File: \\avogadro\organics\E2.i\150512F.B\E2P0419F.D
Report Date: 13-May-2015 17:29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0419F.D
 Date: 13-May-2015 00:03
 Client ID: AR16604E2
 Sample Info: AR16604E2,AR16604E2,,ar1660,sub,
 Volume Injected (uL): 1.0
 Column phase: CLPrest

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0419R.D
 Lab Smp Id: AR16604E2 Client Smp ID: AR16604E2
 Inj Date : 13-MAY-2015 00:03
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16604E2,AR16604E2,,ar1660.sub,,
 Misc Info : 1,4,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:03 Cal File: E2P0419R.D
 Als bottle: 27 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS									
			CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO	
====	=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
3.623	3.623	0.000	24987	0.04000	0.041	(a)			

6 Aroclor-1016					CAS #: 12674-11-2				
5.102	5.101	0.001	15075	0.80000	0.73	80.00-	120.00	100.00(a)	
5.873	5.871	0.002	23024	0.80000	0.84	133.48-	173.48	152.73	
6.683	6.682	0.001	13454	0.80000	0.80	67.22-	107.22	89.25	
Average of Peak Amounts =					0.79000				

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3				
10.231	10.229	0.002	47414	0.08000	0.074				

8 Aroclor-1260					CAS #: 11096-82-5				
7.971	7.969	0.002	27946	0.80000	0.75	80.00-	120.00	100.00(a)	
8.456	8.454	0.002	35834	0.80000	0.80	103.05-	143.05	128.23	
8.964	8.962	0.002	49300	0.80000	0.79	143.47-	183.47	176.41	
Average of Peak Amounts =					0.78000				

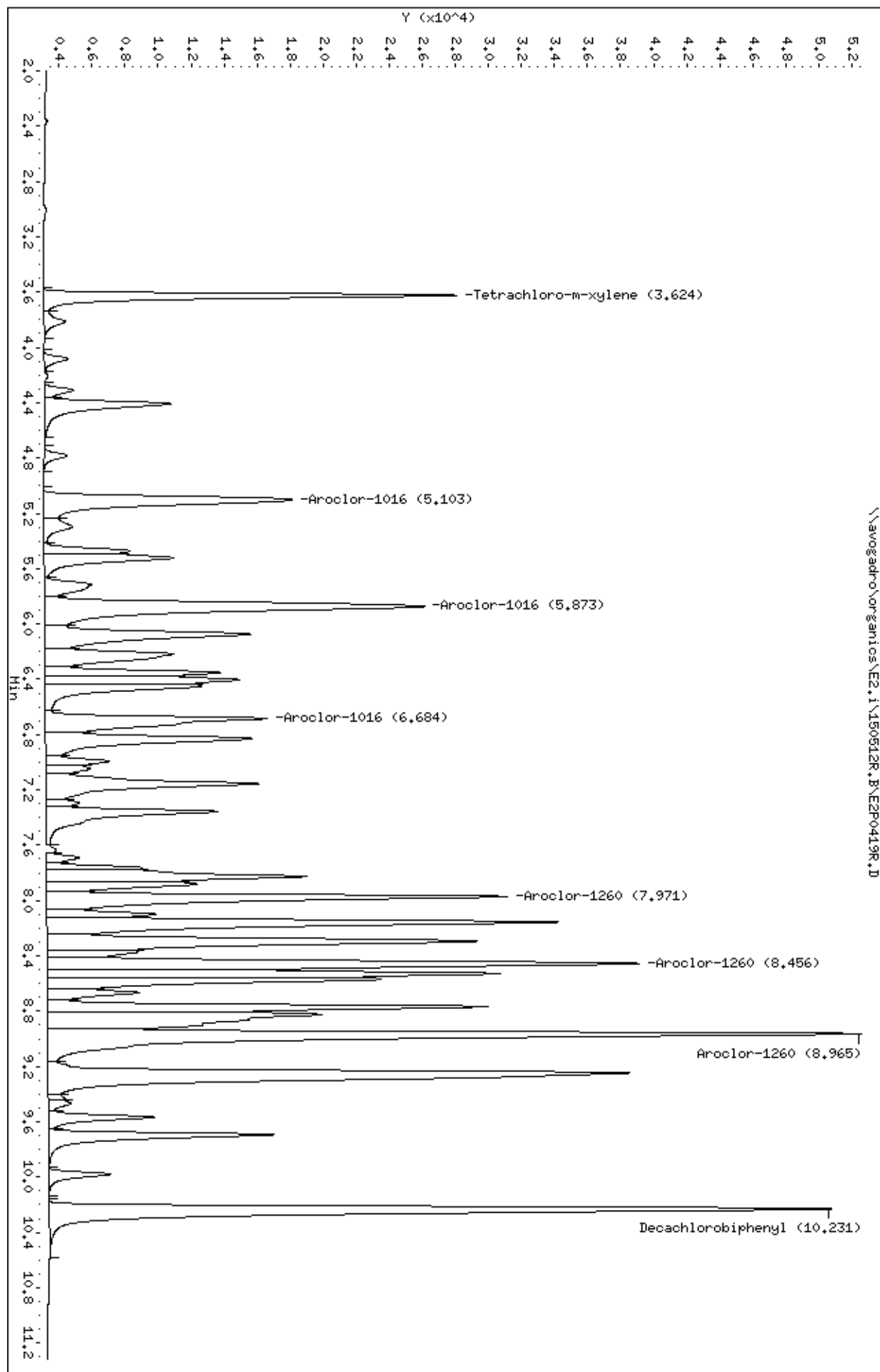
Data File: \\avogadro\organics\E2.i\150512R.B\E2P0419R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150512R.B\E2P0419R.D
Date: 13-May-2015 00:03
Client ID: AR16604E2
Sample Info: AR16604E2,AR16604E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLP-PestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512F.B\E2P0420F.D
 Lab Smp Id: AR16605E2 Client Smp ID: AR16605E2
 Inj Date : 13-MAY-2015 00:17
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16605E2,AR16605E2,,ar1660.sub,,
 Misc Info : 1,5,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150512F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 10:34 jwarner Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 28 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS									
			CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
2.938	2.938	0.000	54355	0.08000	0.073				

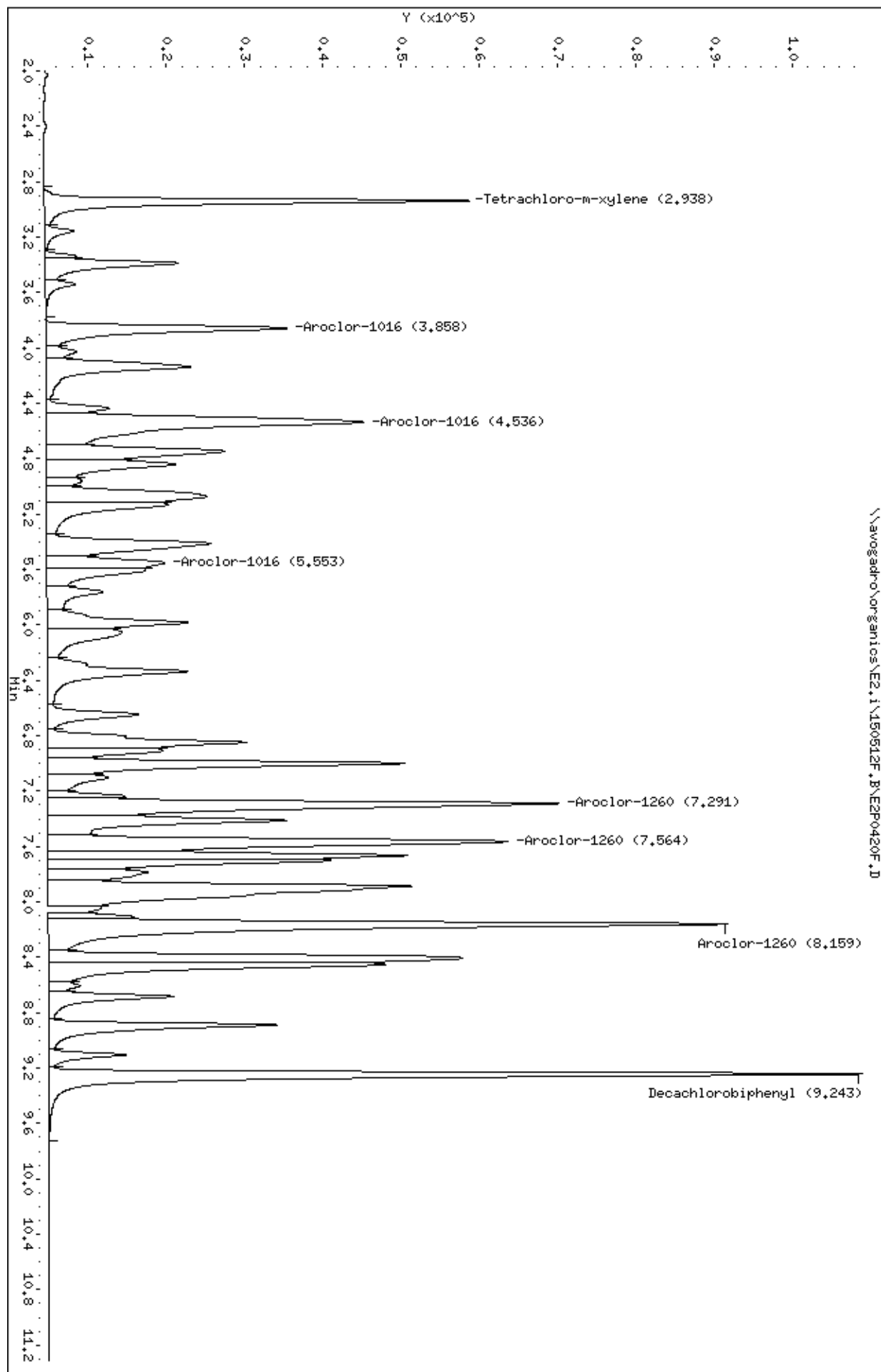
5 Aroclor-1016					CAS #: 12674-11-2				
3.857	3.857	0.000	30894	1.60000	1.3	80.00-	120.00	100.00	
4.536	4.536	0.000	40551	1.60000	1.6	103.49-	143.49	131.26	
5.552	5.552	0.000	15047	1.60000	1.6	19.19-	59.19	48.71	
Average of Peak Amounts =					1.50000				

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3				
9.242	9.242	0.000	3083922	0.16000	0.13				

9 Aroclor-1260					CAS #: 11096-82-5				
7.290	7.290	0.000	65301	1.60000	1.4	80.00-	120.00	100.00	
7.563	7.563	0.000	58774	1.60000	1.4	64.59-	104.59	90.00	
8.159	8.159	0.000	86844	1.60000	1.4	100.16-	140.16	132.99	
Average of Peak Amounts =					1.40000				

Data File: \\avogadro\organics\E2.i\150512F.B\E2P0420F.D
Date: 13-May-2015 00:17
Client ID: AR16605E2
Sample Info: AR16605E2,AR16605E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150512R.B\E2P0420R.D
Lab Smp Id: AR16605E2 Client Smp ID: AR16605E2
Inj Date : 13-MAY-2015 00:17
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16605E2,AR16605E2,,ar1660.sub,,
Misc Info : 1,5,,1
Comment :
Method : \\avogadro\organics\E2.i\150512R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 10:24 jwarner Quant Type: ESTD
Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
Als bottle: 28 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
		CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (	ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.622	3.623	-0.001	49532	0.08000	0.081	

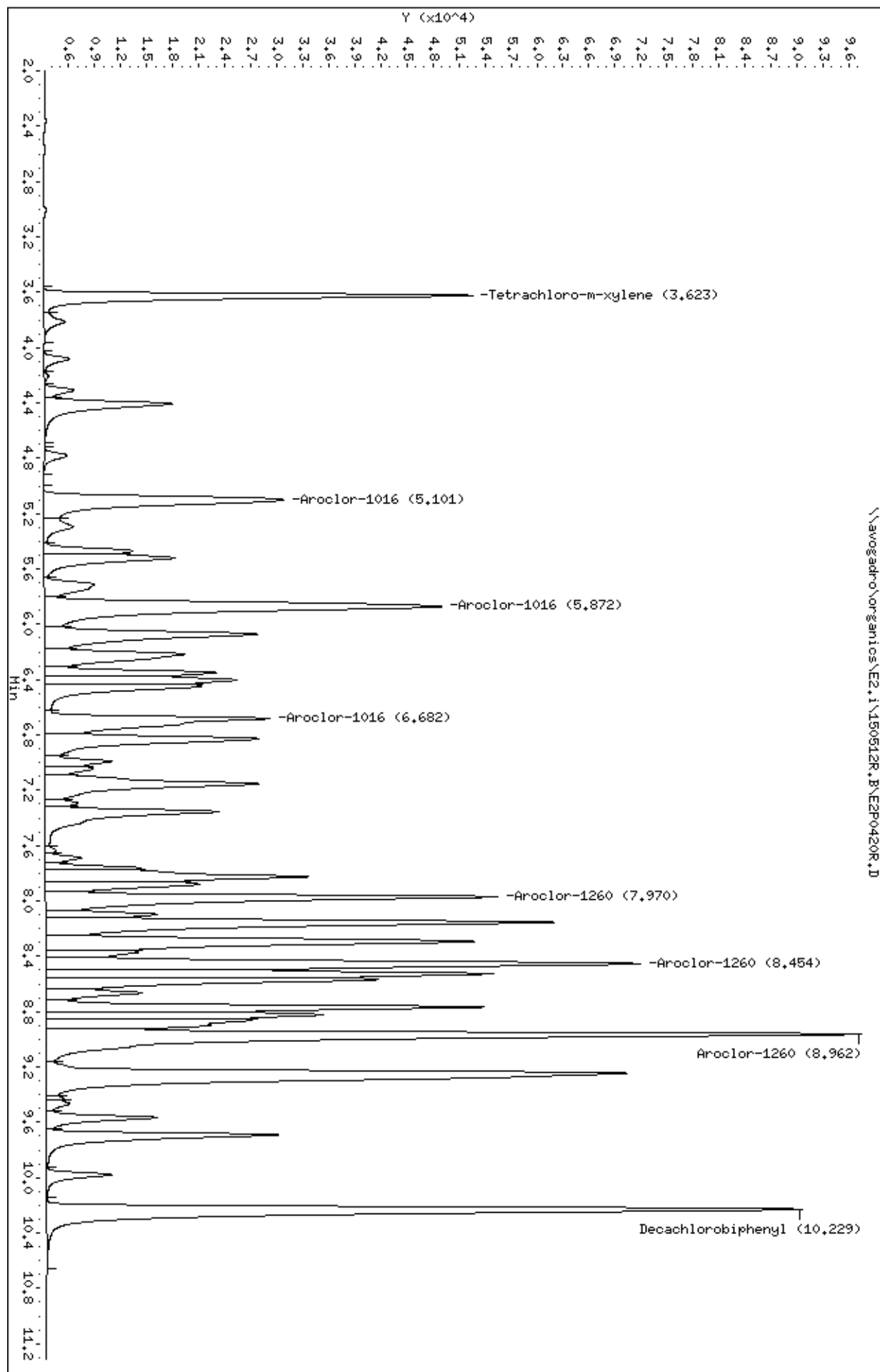
6 Aroclor-1016		CAS #: 12674-11-2				
5.101	5.101	0.000	27613	1.60000	1.3 80.00- 120.00	100.00
5.871	5.871	0.000	45893	1.60000	1.7 133.48- 173.48	166.20
6.682	6.682	0.000	25989	1.60000	1.5 67.22- 107.22	94.12
Average of Peak Amounts =			1.50000			

\$ 11 Decachlorobiphenyl		CAS #: 2051-24-3				
10.229	10.229	0.000	87313	0.16000	0.14	

8 Aroclor-1260		CAS #: 11096-82-5				
7.969	7.969	0.000	52209	1.60000	1.4 80.00- 120.00	100.00
8.454	8.454	0.000	68625	1.60000	1.5 103.05- 143.05	131.44
8.962	8.962	0.000	94185	1.60000	1.5 143.47- 183.47	180.40
Average of Peak Amounts =			1.46667			

Data File: \\avogadro\organics\E2.i\150512R.B\EP0420R.D
Date: 13-May-2015 00:17
Client ID: AR16605E2
Sample Info: AR16605E2,AR16605E2,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0147F.D
Lab Smp Id: AR16603CA Client Smp ID: AR16603CA
Inj Date : 07-MAY-2015 21:27
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603CA, AR16603CA, , ar1660.sub, ,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	15941 0.02000	0.021		(a)

5	Aroclor-1016		CAS #: 12674-11-2			
3.857	3.855	0.002	9700 0.40000	0.39	80.00- 120.00	100.00(a)
4.538	4.534	0.004	9180 0.40000	0.40	83.39- 123.39	94.64
5.554	5.551	0.003	4119 0.40000	0.42	23.00- 63.00	42.46
Average of Peak Amounts =			0.40333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.242	9.241	0.001	981709 0.04000	0.042		(a)

9	Aroclor-1260		CAS #: 11096-82-5			
7.294	7.289	0.005	18359 0.40000	0.40	80.00- 120.00	100.00(a)
7.568	7.562	0.006	15589 0.40000	0.41	66.20- 106.20	84.91
8.161	8.157	0.004	23137 0.40000	0.41	108.17- 148.17	126.03
Average of Peak Amounts =			0.40667			

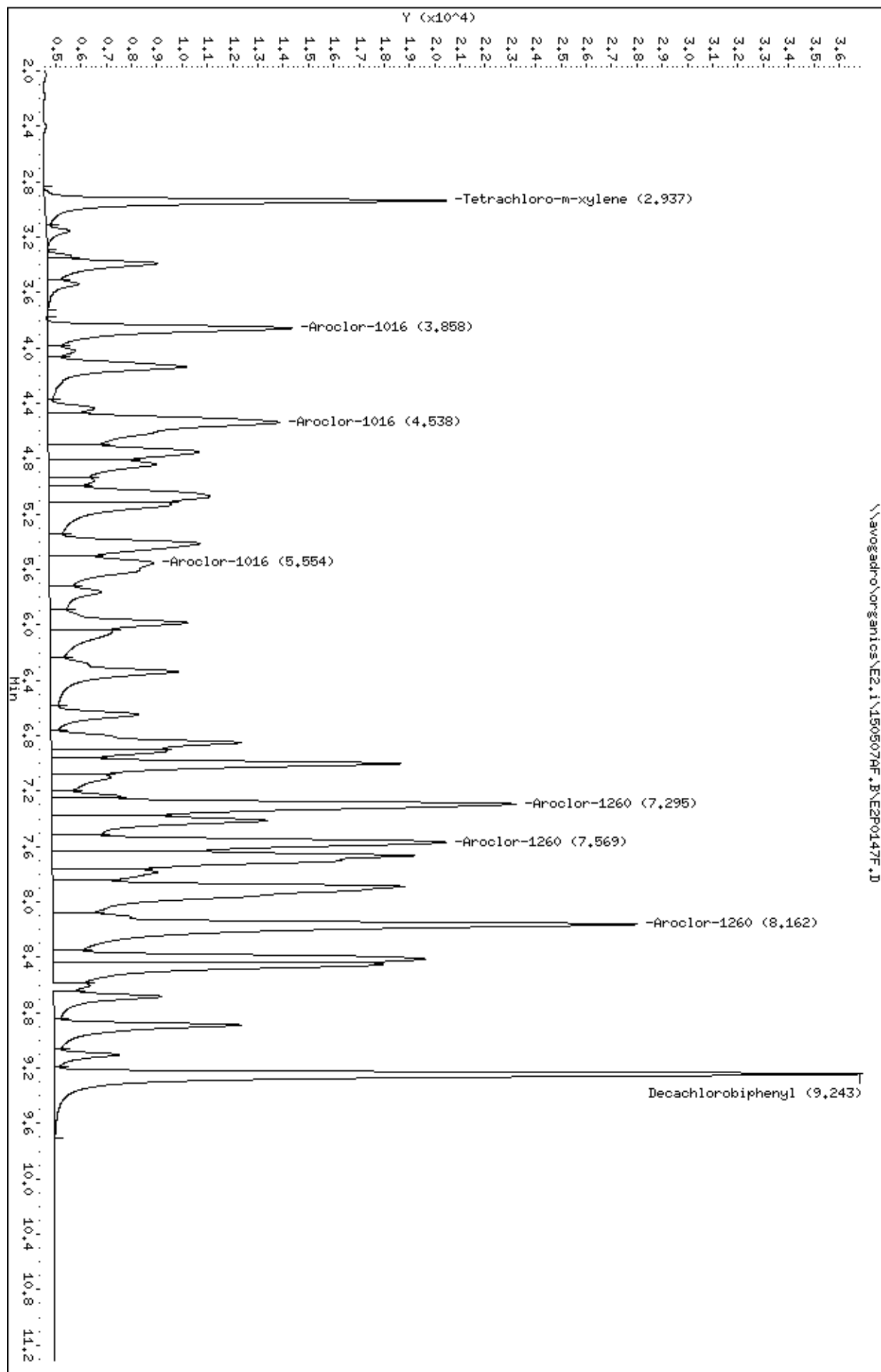
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0147F.D
Report Date: 11-May-2015 15:41

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0147F.D
Date : 07-MAY-2015 21:27
Client ID: AR16603CA
Sample Info: AR16603CA,AR16603CA,,ar1660,sdk,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0147R.D
Lab Smp Id: AR16603CA Client Smp ID: AR16603CA
Inj Date : 07-MAY-2015 21:27
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603CA,AR16603CA,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	

\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
3.623	3.623	0.000	11777 0.02000	0.021	(a)		

6	Aroclor-1016		CAS #: 12674-11-2				
5.102	5.100	0.002	7294 0.40000	0.39	80.00- 120.00	100.00(a)	
5.874	5.871	0.003	7849 0.40000	0.41	90.59- 130.59	107.61	
6.683	6.681	0.002	5657 0.40000	0.41	58.70- 98.70	77.56	
Average of Peak Amounts =			0.40333				

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
10.230	10.227	0.003	19757 0.04000	0.042	(a)		

8	Aroclor-1260		CAS #: 11096-82-5				
7.971	7.968	0.003	12601 0.40000	0.41	80.00- 120.00	100.00(a)	
8.454	8.450	0.004	12336 0.40000	0.42	80.01- 120.01	97.90	
8.962	8.958	0.004	16309 0.40000	0.42	105.59- 145.59	129.43	
Average of Peak Amounts =			0.41667				

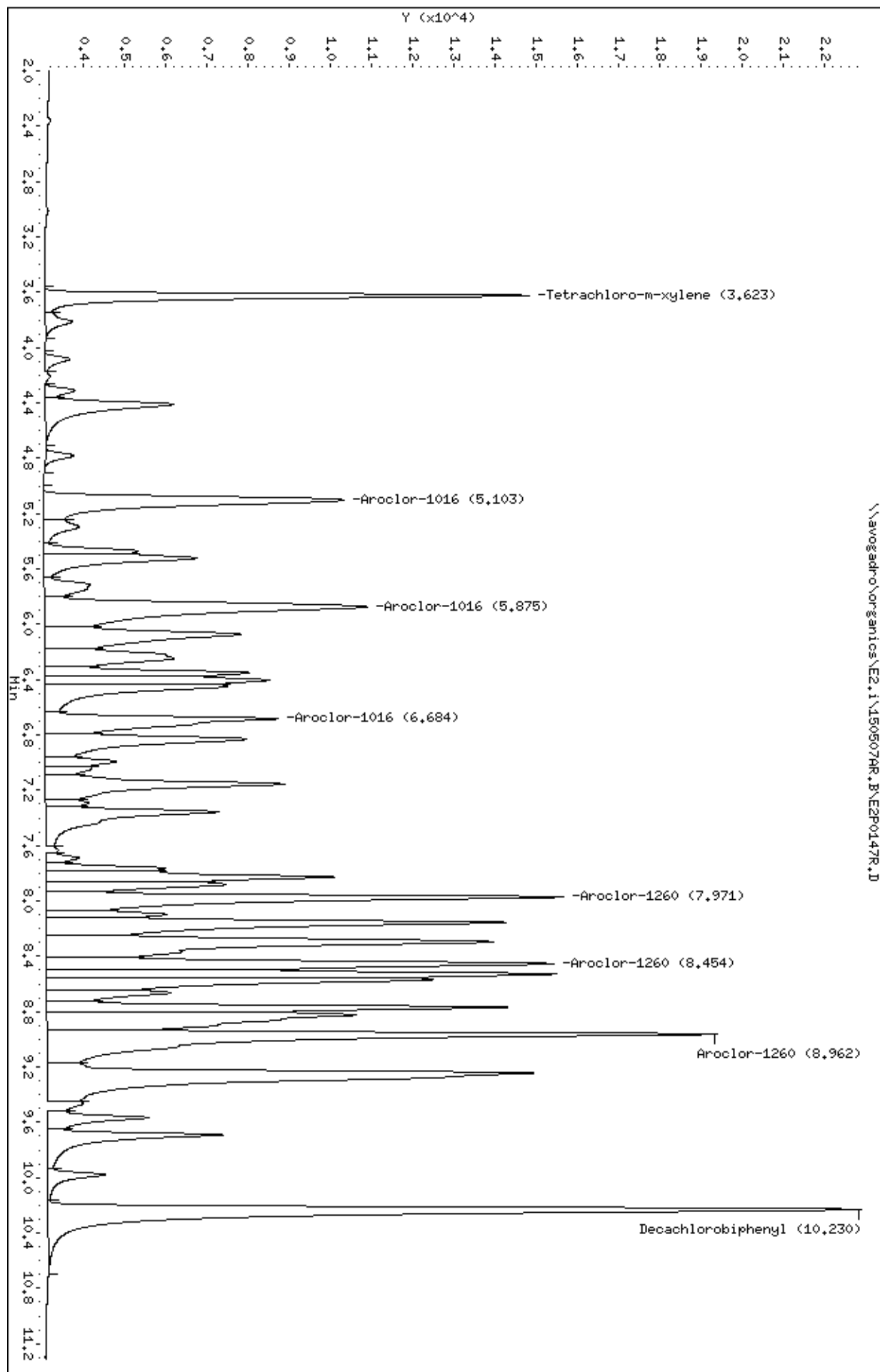
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0147R.D
Report Date: 11-May-2015 15:43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HR,B\EP0147R.D
Date: 07-MAY-2015 21:27
Client ID: AR16603CA
Sample Info: AR16603CA,AR16603CA,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0148F.D
 Lab Smp Id: AR12543CA Client Smp ID: AR12543CA
 Inj Date : 07-MAY-2015 21:42
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12543CA, AR12543CA, , ar1254.sub, ,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 18 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

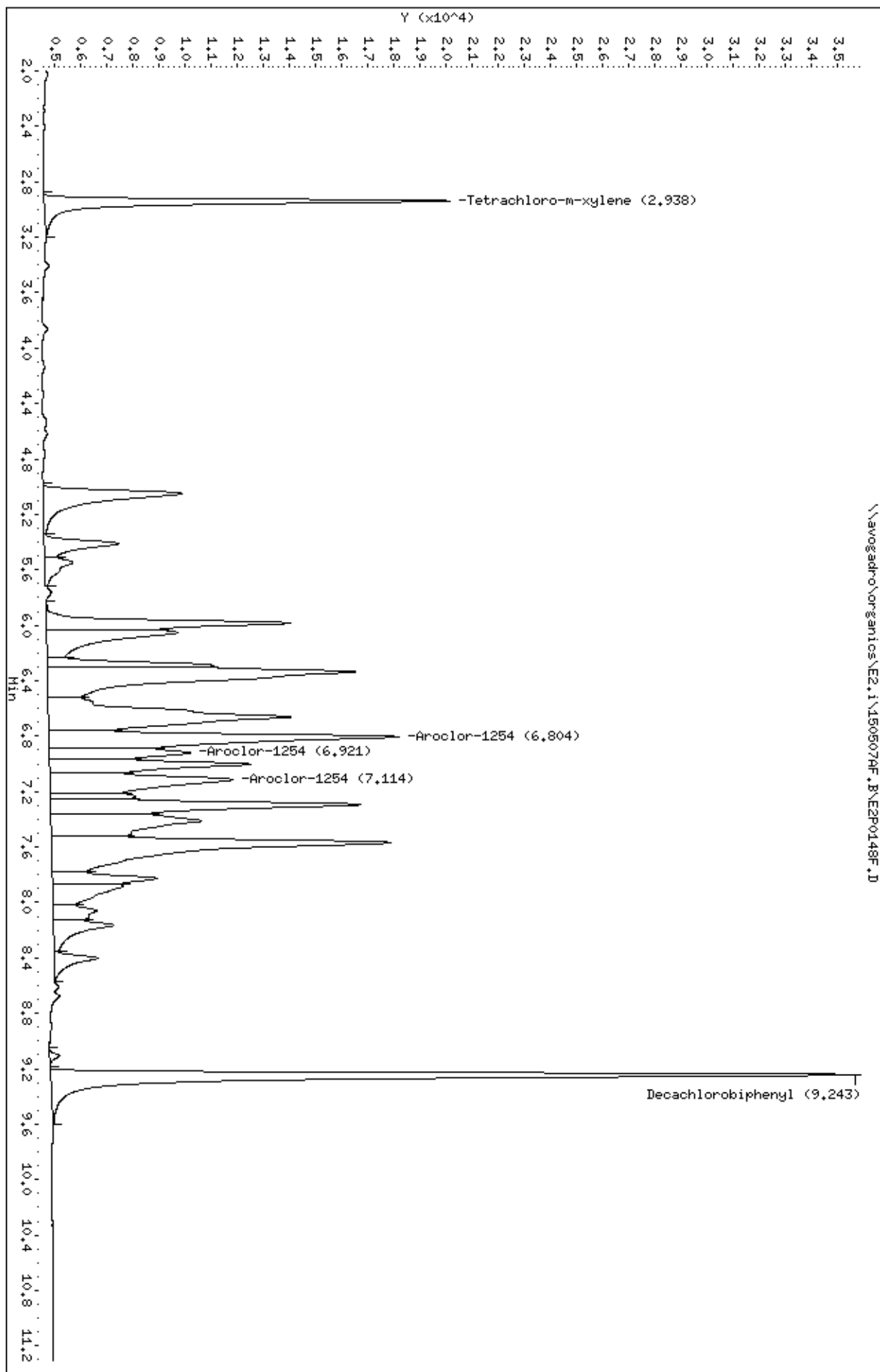
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.937	2.936	0.001	15595 0.02000	0.020		(a)
\$ 11					CAS #: 2051-24-3	
9.243	9.241	0.002	952094 0.04000	0.040		(a)
8					CAS #: 11097-69-1	
6.804	6.799	0.005	13377 0.40000	0.41	80.00- 120.00	100.00(a)
6.920	6.918	0.002	5390 0.40000	0.41	18.25- 58.25	40.29
7.114	7.105	0.009	6978 0.40000	0.42	35.49- 75.49	52.16
Average of Peak Amounts =			0.41333			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\EP0148F.D
Date : 07-MAY-2015 21:42
Client ID: AR125430A
Sample Info: AR125430A,AR125430A,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0148R.D
Lab Smp Id: AR12543CA Client Smp ID: AR12543CA
Inj Date : 07-MAY-2015 21:42
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12543CA, AR12543CA, , ar1254.sub, ,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1254.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1					CAS #: 877-09-8	
3.623	3.623	0.000	11689 0.02000	0.021		(a)

\$ 11					CAS #: 2051-24-3	
10.229	10.227	0.002	19589 0.04000	0.041		(a)

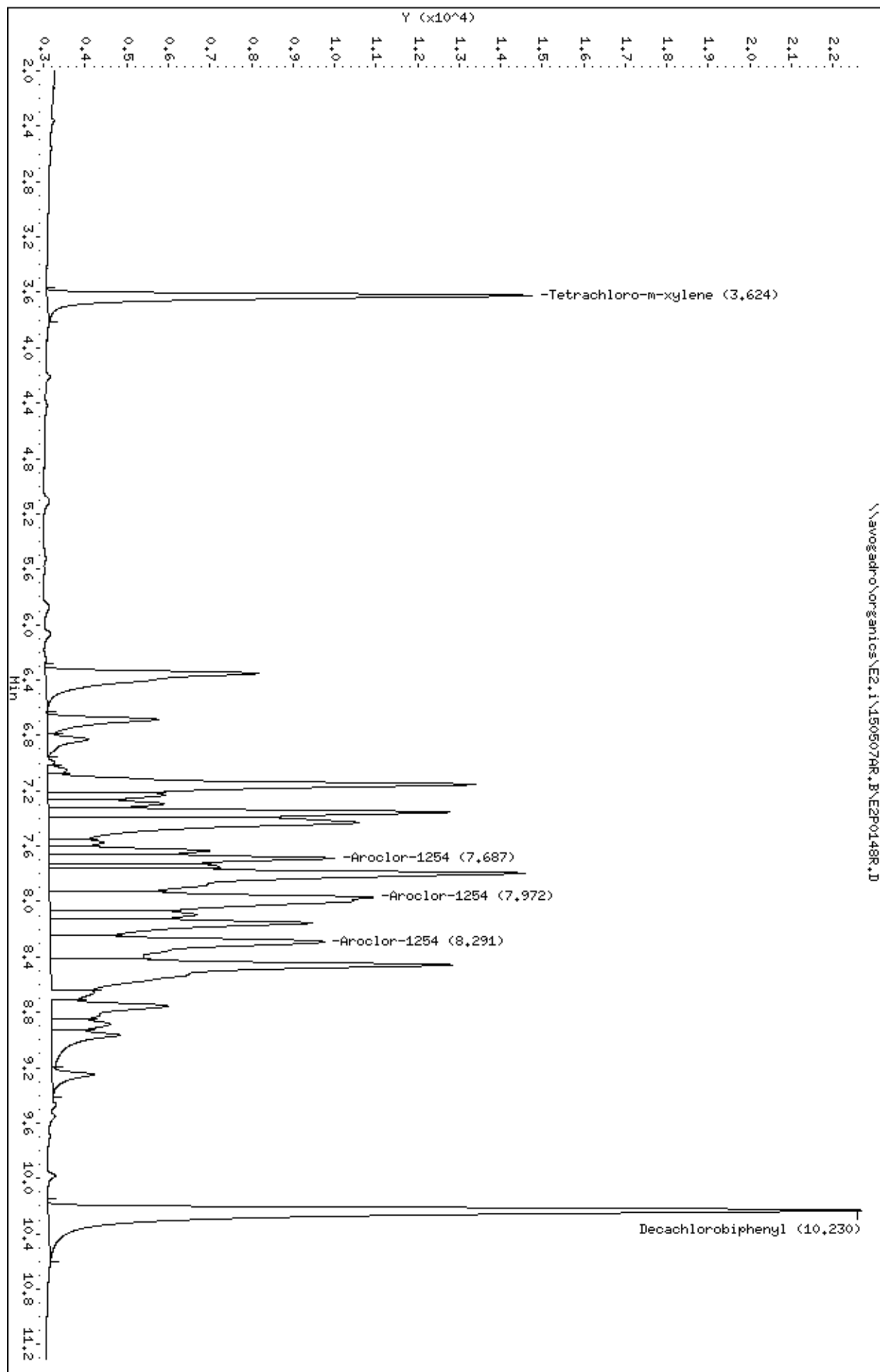
7					CAS #: 11097-69-1	
7.687	7.684	0.003	6879 0.40000	0.43	80.00- 120.00	100.00(a)
7.971	7.968	0.003	7793 0.40000	0.42	88.83- 128.83	113.29
8.291	8.291	0.000	6595 0.40000	0.43	73.31- 113.31	95.87
Average of Peak Amounts =			0.42667			

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0148R.D
Date : 07-MAY-2015 21:42
Client ID: AR125430A
Sample Info: AR125430A,AR125430A,,ar-1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0150F.D
 Lab Smp Id: AR12483CA Client Smp ID: AR12483CA
 Inj Date : 07-MAY-2015 22:11
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483CA, AR12483CA, , ar1248.sub, ,
 Misc Info : 2, 3, , 1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
2.938	2.936	0.002	15737	0.02000	0.020			(a)

7 Aroclor-1248					CAS #: 12672-29-6			
6.073	6.070	0.003	7270	0.40000	0.45	80.00-	120.00	100.00(a)
6.338	6.334	0.004	7021	0.40000	0.44	69.73-	109.73	96.57
6.806	6.802	0.004	4823	0.40000	0.46	34.63-	74.63	66.34
Average of Peak Amounts =					0.45000			

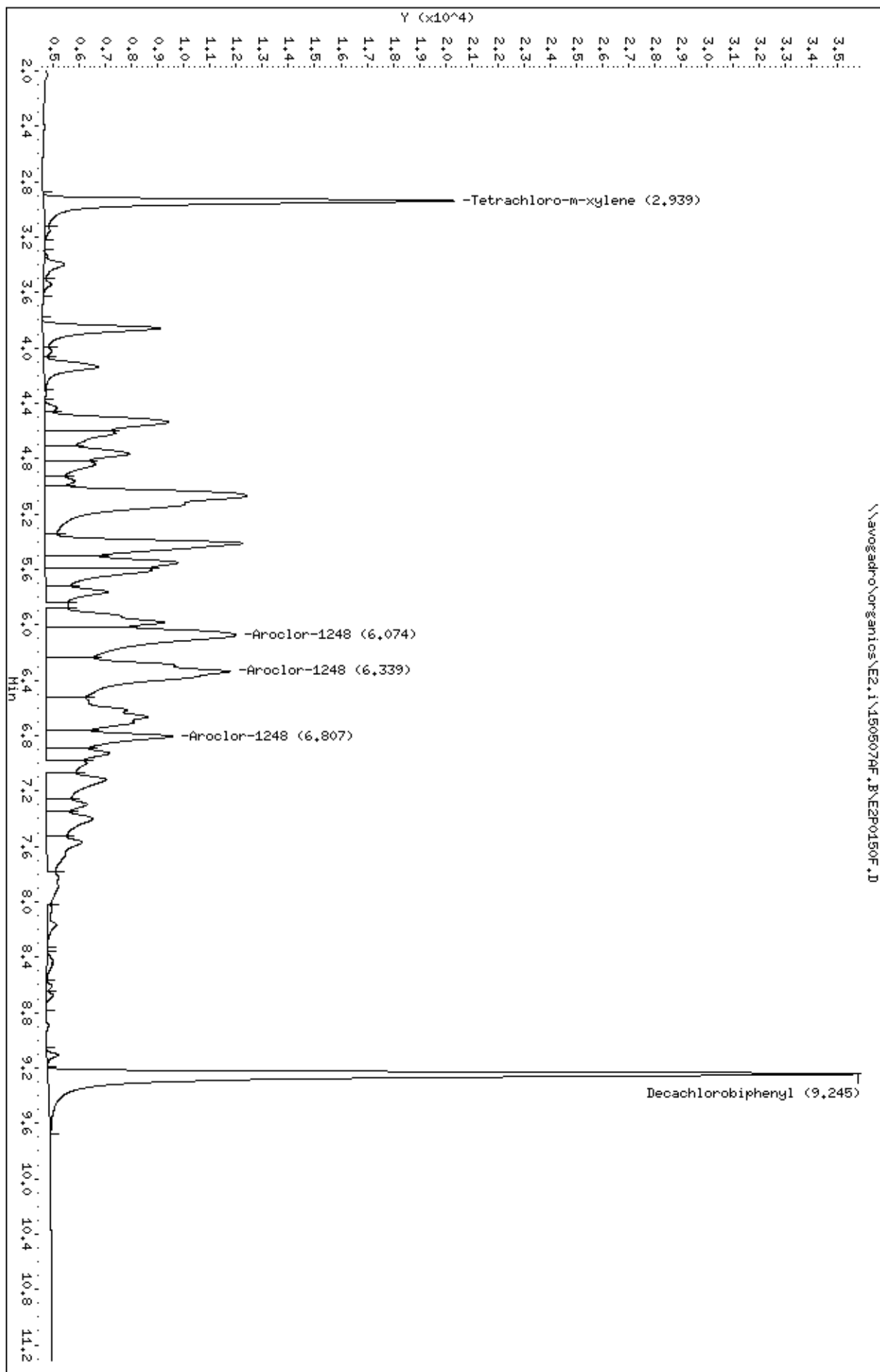
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
9.244	9.241	0.003	968886	0.04000	0.041			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0150F.D
Date : 07-MAY-2015 22:11
Client ID: AR124830A
Sample Info: AR124830A,AR124830A,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0150R.D
 Lab Smp Id: AR12483CA Client Smp ID: AR12483CA
 Inj Date : 07-MAY-2015 22:11
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483CA, AR12483CA, , ar1248.sub, ,
 Misc Info : 2, 3, , 1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.624	3.623	0.001	11797 0.02000	0.021		(a)

5	Aroclor-1248		CAS #: 12672-29-6			
7.048	7.044	0.004	2442 0.40000	0.43 80.00- 120.00	100.00(a)	
7.158	7.156	0.002	7420 0.40000	0.42 305.09- 345.09	303.85	
7.798	7.794	0.004	3847 0.40000	0.44 133.79- 173.79	157.53	
Average of Peak Amounts =			0.43000			

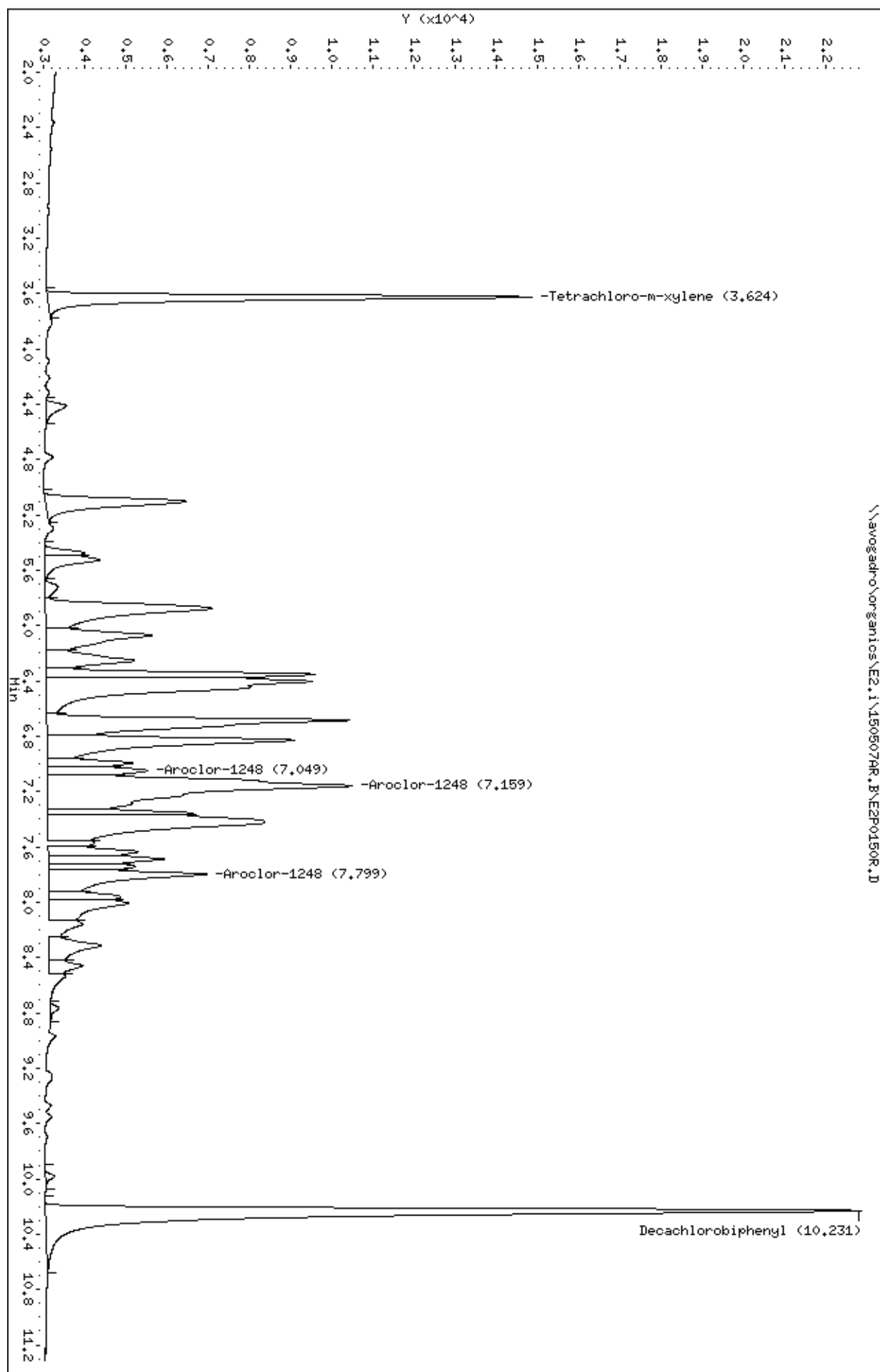
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.230	10.227	0.003	19814 0.04000	0.042		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0150R.D
Date : 07-MAY-2015 22:11
Client ID: AR124830A
Sample Info: AR124830A,AR124830A,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0175F.D
Lab Smp Id: AR16603CB Client Smp ID: AR16603CB
Inj Date : 08-MAY-2015 04:13
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603CB,AR16603CB,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.936	2.936	0.000	15982 0.02000	0.021		(a)

5	Aroclor-1016		CAS #: 12674-11-2			
3.856	3.855	0.001	9778 0.40000	0.39	80.00- 120.00	100.00(a)
4.536	4.534	0.002	10109 0.40000	0.44	83.39- 123.39	103.39
5.553	5.551	0.002	4205 0.40000	0.43	23.00- 63.00	43.00
Average of Peak Amounts =			0.42000			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.242	9.241	0.001	987829 0.04000	0.042		(a)

9	Aroclor-1260		CAS #: 11096-82-5			
7.294	7.289	0.005	19265 0.40000	0.42	80.00- 120.00	100.00(a)
7.567	7.562	0.005	16606 0.40000	0.44	66.20- 106.20	86.20
8.160	8.157	0.003	24691 0.40000	0.44	108.17- 148.17	128.17
Average of Peak Amounts =			0.43333			

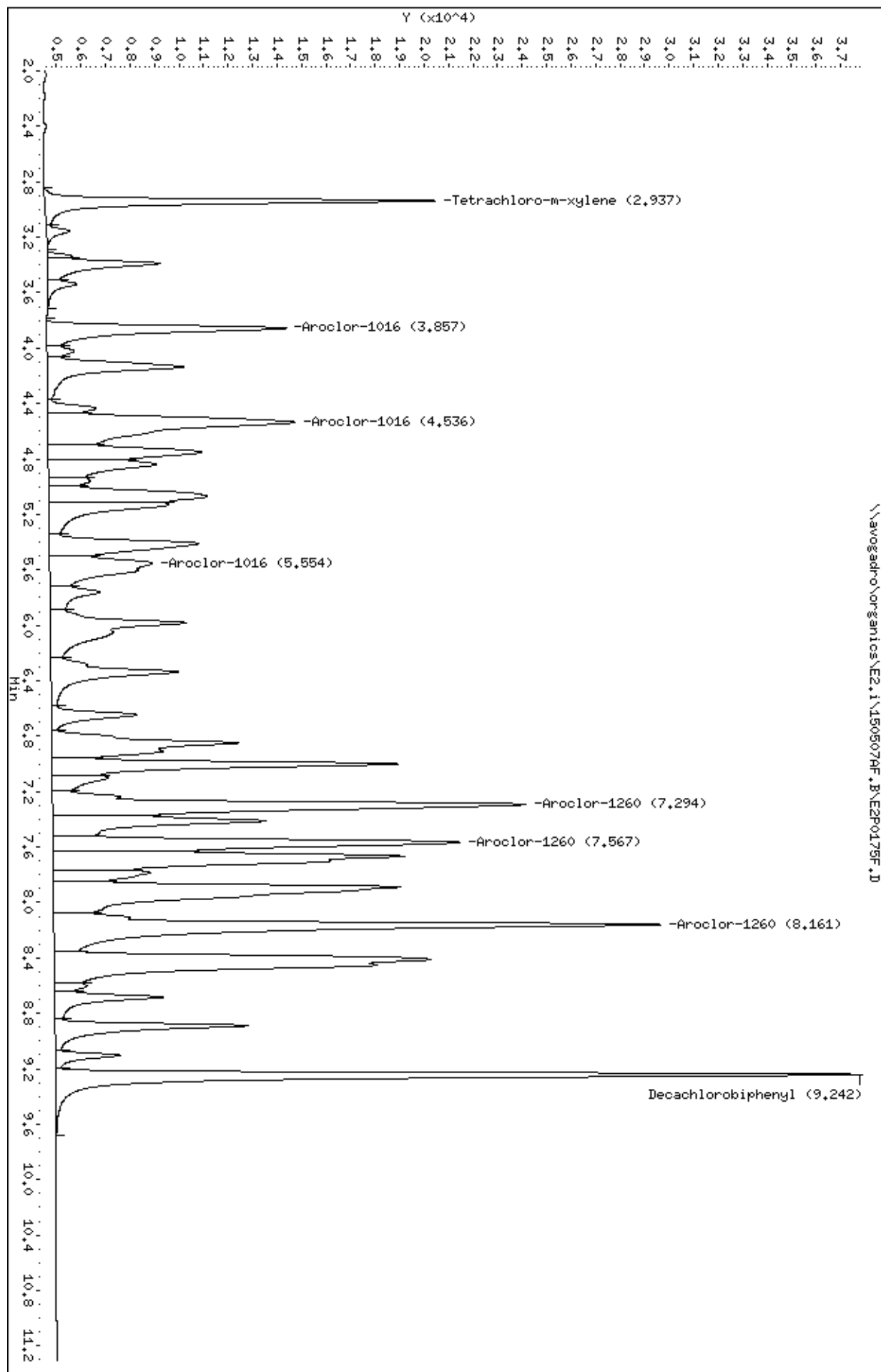
Data File: \\avogadro\organics\E2.i\150507AF.B\E2P0175F.D
Report Date: 11-May-2015 15:42

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0175F.D
Date : 08-MAY-2015 04:13
Client ID: AR16603CB
Sample Info: AR16603CB,AR16603CB,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0175R.D
 Lab Smp Id: AR16603CB Client Smp ID: AR16603CB
 Inj Date : 08-MAY-2015 04:13
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603CB,AR16603CB,,ar1660.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 26 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	12289	0.02000	0.022			(a)

6 Aroclor-1016					CAS #: 12674-11-2			
5.102	5.100	0.002	7604	0.40000	0.41	80.00-	120.00	100.00(a)
5.873	5.871	0.002	8409	0.40000	0.44	90.59-	130.59	110.59
6.683	6.681	0.002	5984	0.40000	0.43	58.70-	98.70	78.70
Average of Peak Amounts =					0.42667			

\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.229	10.227	0.002	23059	0.04000	0.049			(a)

8 Aroclor-1260					CAS #: 11096-82-5			
7.970	7.968	0.002	13307	0.40000	0.43	80.00-	120.00	100.00(a)
8.453	8.450	0.003	13308	0.40000	0.45	80.01-	120.01	100.01
8.962	8.958	0.004	16712	0.40000	0.43	105.59-	145.59	125.59
Average of Peak Amounts =					0.43667			

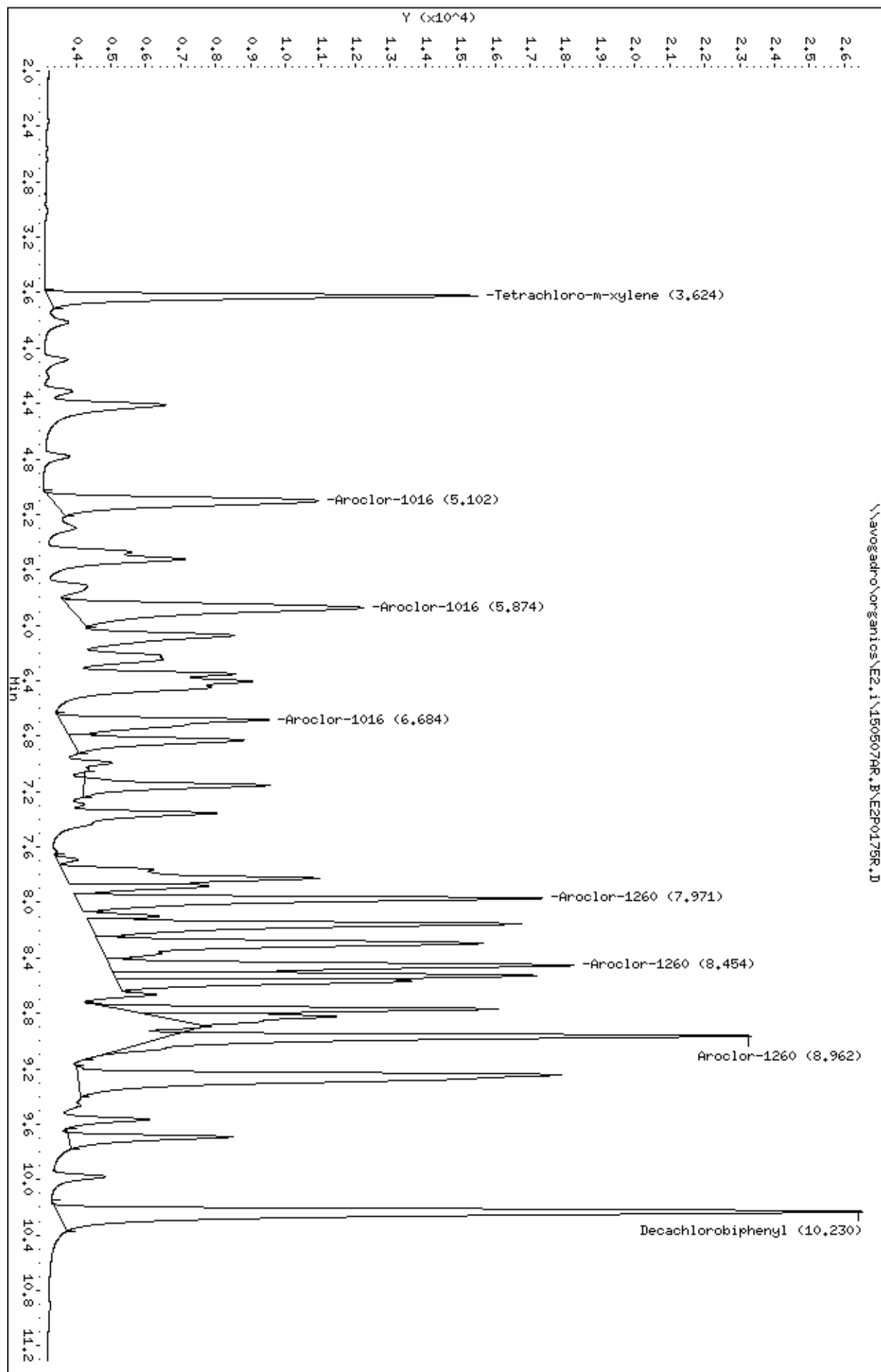
Data File: \\avogadro\organics\E2.i\150507AR.B\E2P0175R.D
Report Date: 11-May-2015 15:44

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0175R.D
Date : 08-MAY-2015 04:13
Client ID: AR16603CB
Sample Info: AR16603CB,AR16603CB,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0176F.D
 Lab Smp Id: AR12543CB Client Smp ID: AR12543CB
 Inj Date : 08-MAY-2015 04:27
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12543CB,AR12543CB,,ar1254.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 18 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

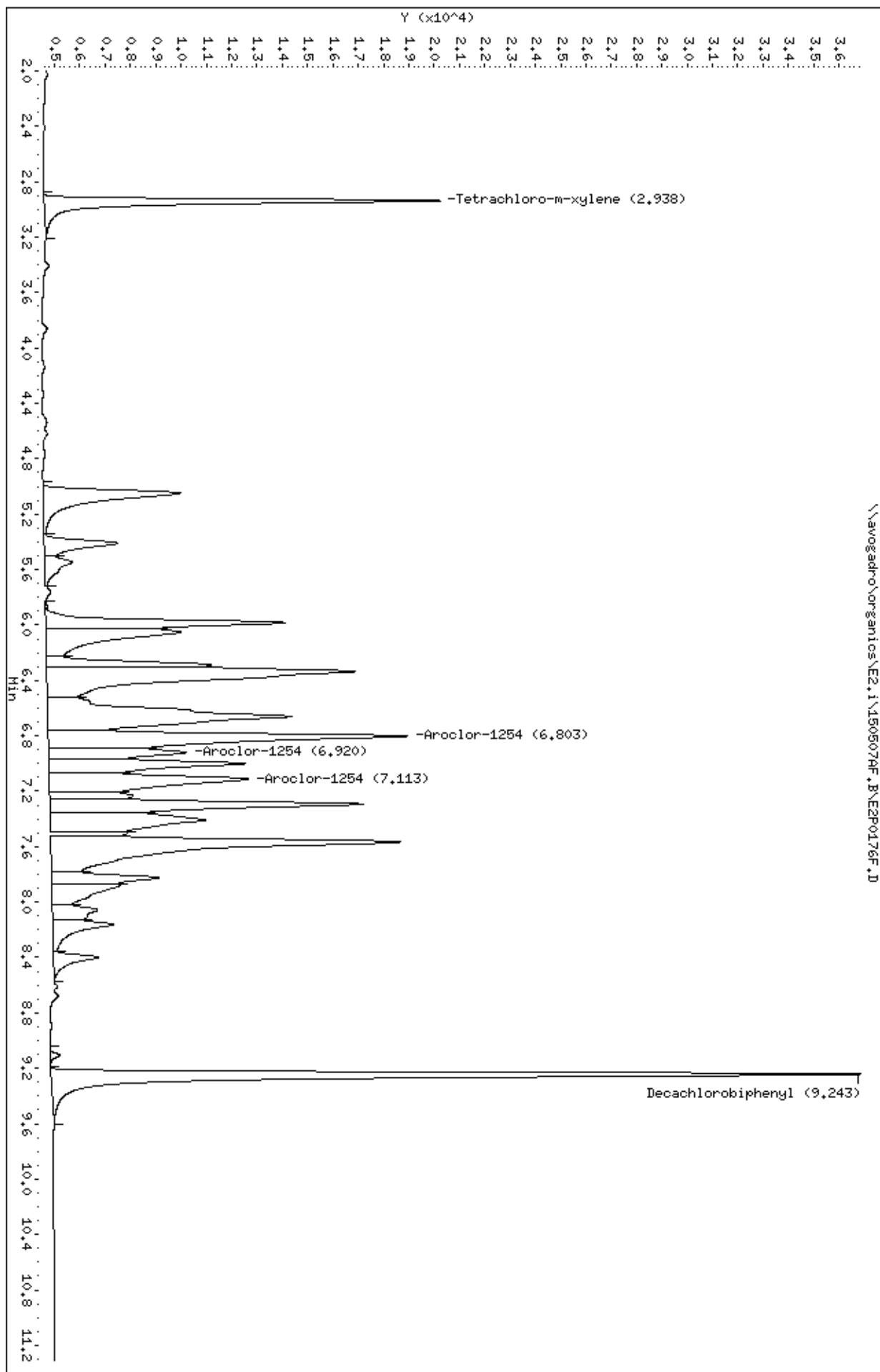
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
2.937	2.936	0.001	15699 0.02000	0.020		(a)
\$ 11					CAS #: 2051-24-3	
9.242	9.241	0.001	967111 0.04000	0.041		(a)
8					CAS #: 11097-69-1	
6.803	6.799	0.004	14184 0.40000	0.43	80.00- 120.00	100.00(a)
6.920	6.918	0.002	5426 0.40000	0.41	18.25- 58.25	38.25
7.112	7.105	0.007	7870 0.40000	0.48	35.49- 75.49	55.49
Average of Peak Amounts =			0.44000			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF,B\E2P0176F.D
Date : 08-MAY-2015 04:27
Client ID: AR12543CB
Sample Info: AR12543CB,AR12543CB,,ar1254,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0176R.D
 Lab Smp Id: AR12543CB Client Smp ID: AR12543CB
 Inj Date : 08-MAY-2015 04:27
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12543CB,AR12543CB,,ar1254.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 18 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1254.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

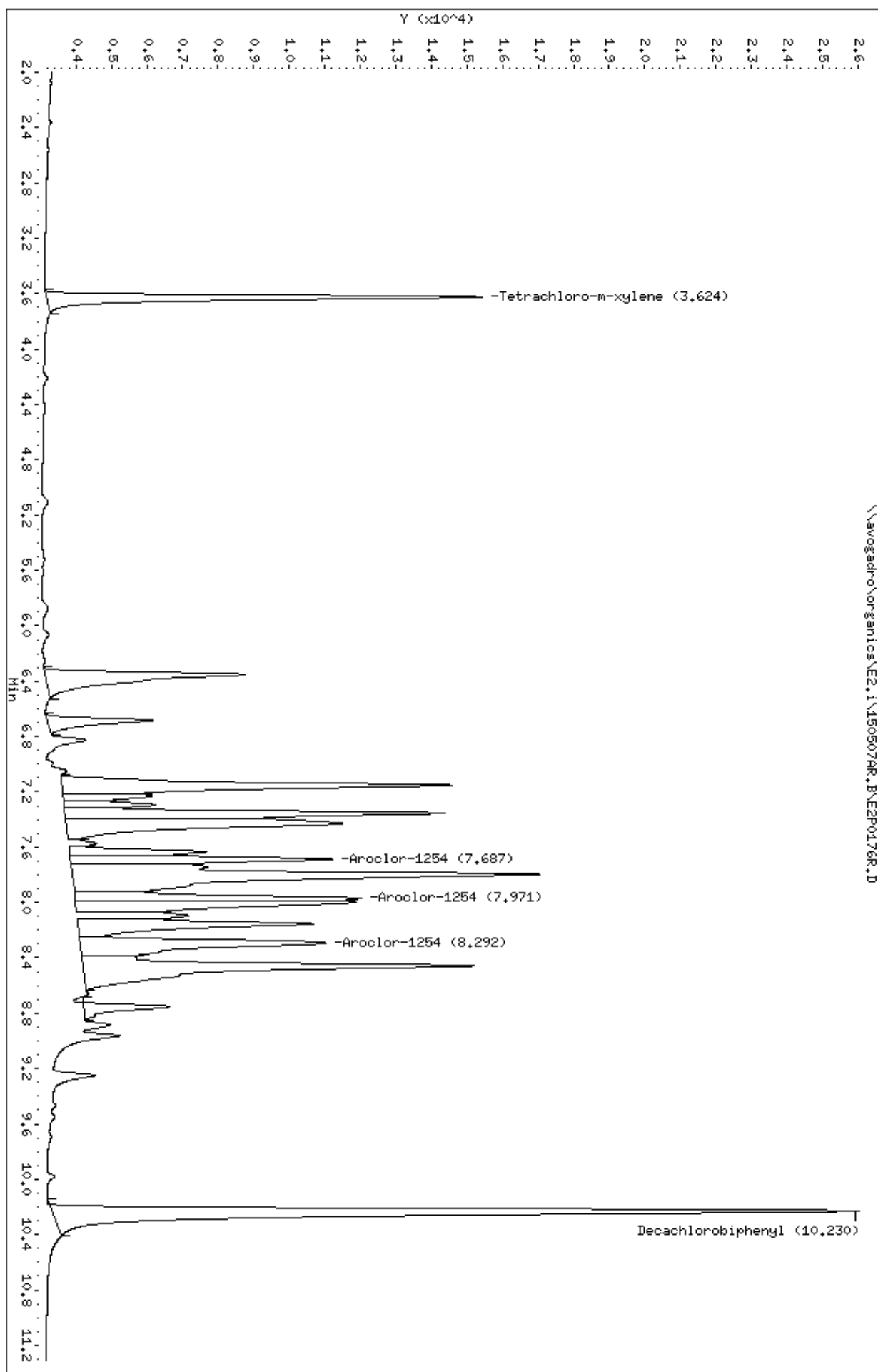
AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
\$ 1					CAS #: 877-09-8	
3.623	3.623	0.000	12286 0.02000	0.022		(a)
\$ 11					CAS #: 2051-24-3	
10.229	10.227	0.002	22732 0.04000	0.048		(a)
7					CAS #: 11097-69-1	
7.686	7.684	0.002	7386 0.40000	0.46	80.00- 120.00	100.00(a)
7.971	7.968	0.003	8038 0.40000	0.43	88.83- 128.83	108.83
8.292	8.291	0.001	6892 0.40000	0.45	73.31- 113.31	93.31
Average of Peak Amounts =			0.44667			

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0176R.D
 Date : 08-MAY-2015 04:27
 Client ID: AR12543CB
 Sample Info: AR12543CB,AR12543CB,,ar1254,sub,,
 Volume Injected (uL): 1.0
 Column phase: CLPrestII

Instrument: E2,i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0178F.D
Lab Smp Id: AR12483CB Client Smp ID: AR12483CB
Inj Date : 08-MAY-2015 04:56
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12483CB,AR12483CB,,ar1248.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.936	2.936	0.000	15769 0.02000	0.020		(a)

7	Aroclor-1248		CAS #: 12672-29-6			
6.072	6.070	0.002	7383 0.40000	0.45	80.00- 120.00	100.00(a)
6.336	6.334	0.002	6625 0.40000	0.41	69.73- 109.73	89.73
6.804	6.802	0.002	4033 0.40000	0.38	34.63- 74.63	54.63
Average of Peak Amounts =			0.41333			

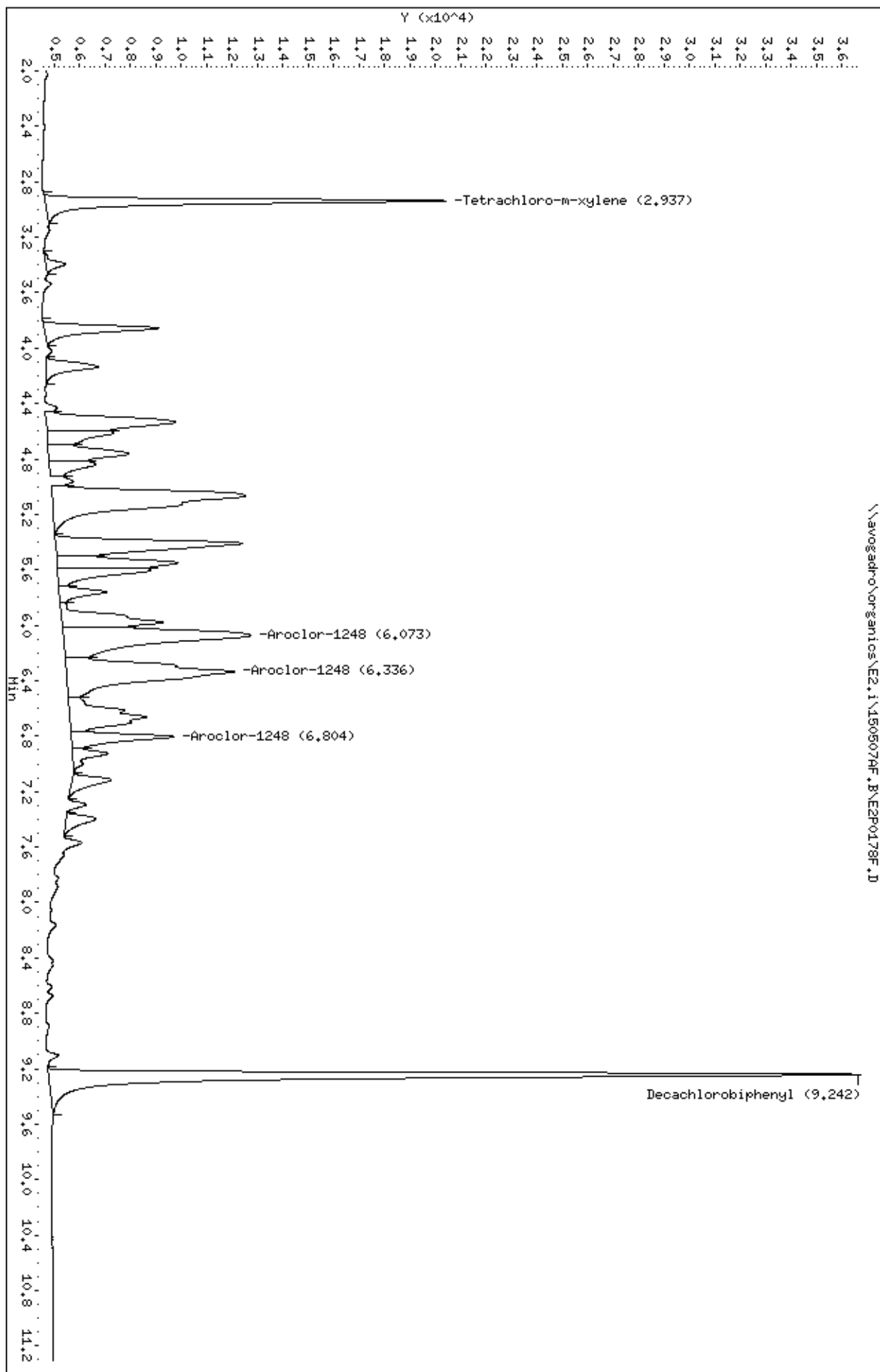
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.242	9.241	0.001	958458 0.04000	0.041		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0178F.D
Date : 08-MAY-2015 04:56
Client ID: AR12483CB
Sample Info: AR12483CB,AR12483CB,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0178R.D
 Lab Smp Id: AR12483CB Client Smp ID: AR12483CB
 Inj Date : 08-MAY-2015 04:56
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483CB,AR12483CB,,ar1248.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.623	3.623	0.000	12366	0.02000	0.022			(a)

5 Aroclor-1248					CAS #: 12672-29-6			
7.046	7.044	0.002	2495	0.40000	0.44	80.00-	120.00	100.00(a)
7.157	7.156	0.001	8111	0.40000	0.46	305.09-	345.09	325.09
7.797	7.794	0.003	3837	0.40000	0.44	133.79-	173.79	153.79
Average of Peak Amounts =					0.44667			

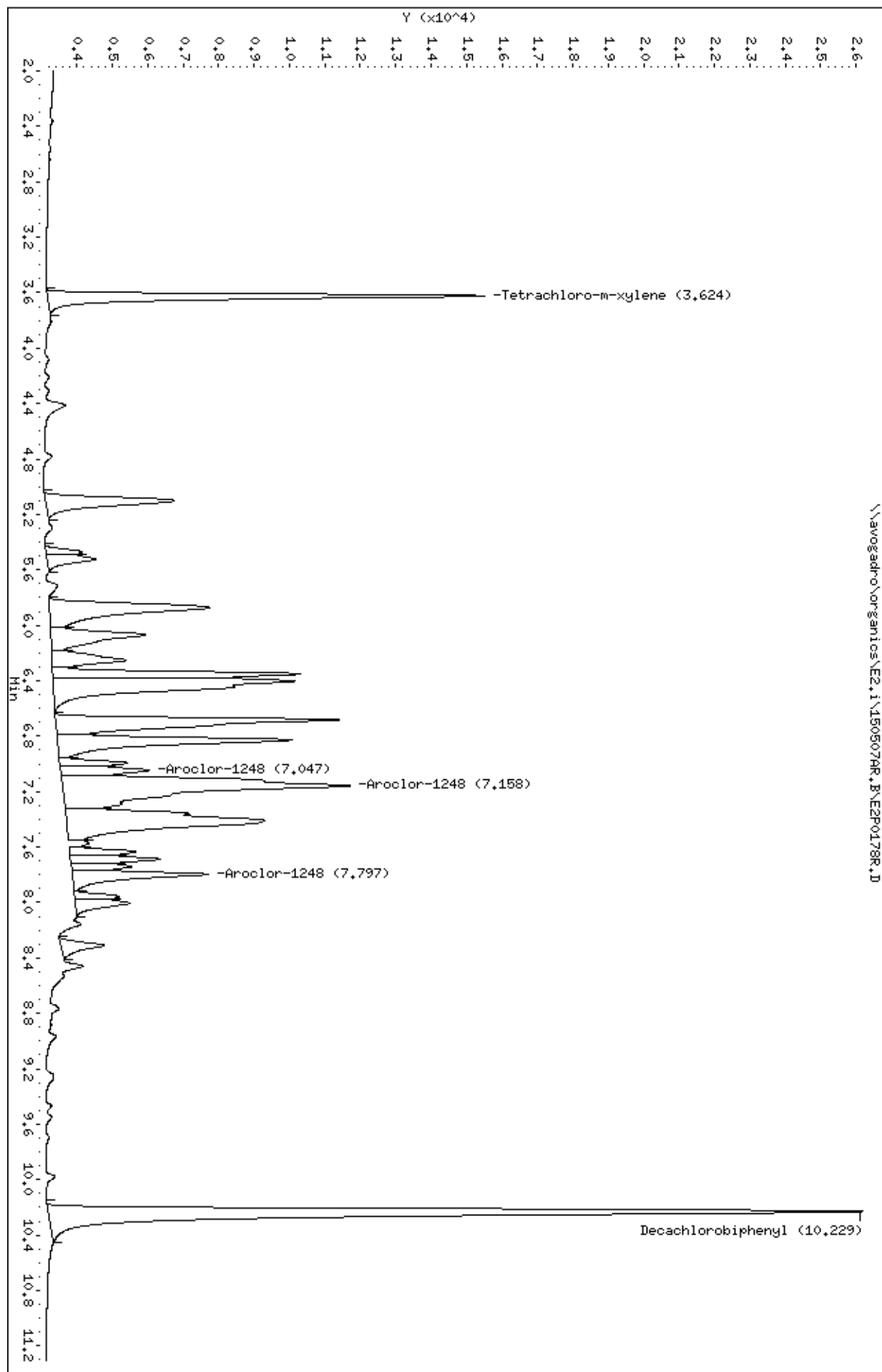
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.229	10.227	0.002	23005	0.04000	0.049			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0178R.D
Date : 08-MAY-2015 04:56
Client ID: AR12483CB
Sample Info: AR12483CB,AR12483CB,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513F.B\E2P0462F.D
 Lab Smp Id: AR16603ED Client Smp ID: AR16603ED
 Inj Date : 13-MAY-2015 11:06
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603ED,AR16603ED,,ar1660.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 26 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO	
=====							
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8				
2.939	2.938	0.001	15550 0.02000	0.021		(a)	

5	Aroclor-1016		CAS #: 12674-11-2				
3.860	3.857	0.003	9579 0.40000	0.40	80.00- 120.00	100.00(a)	
4.539	4.536	0.003	11207 0.40000	0.44	97.88- 137.88	117.00	
5.555	5.552	0.003	3649 0.40000	0.39	18.45- 58.45	38.09	
Average of Peak Amounts =			0.41000				

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3				
9.243	9.242	0.001	878106 0.04000	0.037		(a)	

9	Aroclor-1260		CAS #: 11096-82-5				
7.293	7.290	0.003	20003 0.40000	0.42	80.00- 120.00	100.00(a)	
7.565	7.563	0.002	17347 0.40000	0.43	66.76- 106.76	86.72	
8.160	8.159	0.001	25879 0.40000	0.43	110.80- 150.80	129.38	
Average of Peak Amounts =			0.42667				

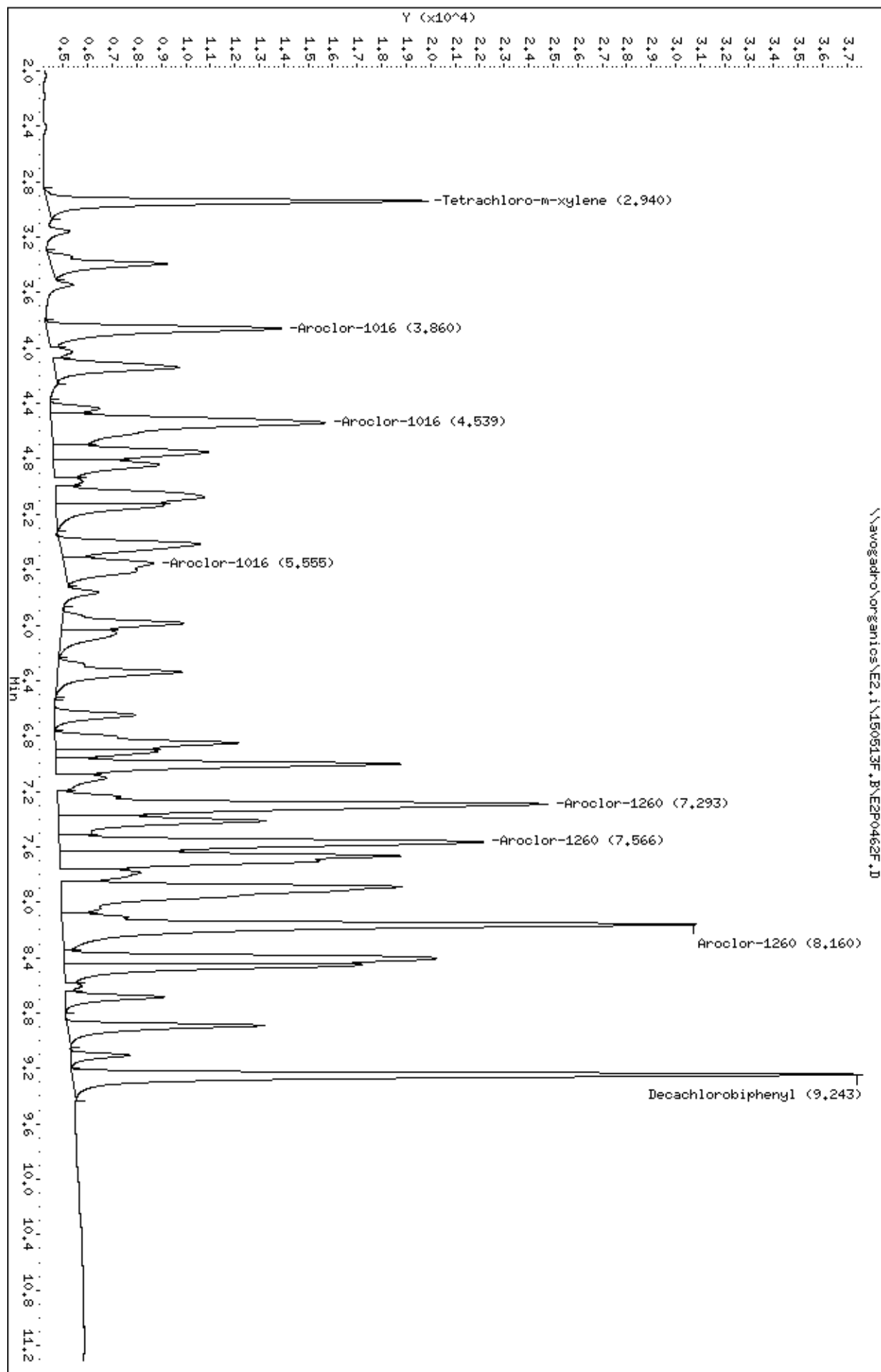
Data File: \\avogadro\organics\E2.i\150513F.B\E2P0462F.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513F.B\E2P0462F.D
Date: 13-May-2015 11:06
Client ID: AR16603ED
Sample Info: AR16603ED,AR16603ED,,ar1660,sdk,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513R.B\E2P0462R.D
Lab Smp Id: AR16603ED Client Smp ID: AR16603ED
Inj Date : 13-MAY-2015 11:06
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR16603ED,AR16603ED,,ar1660.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150513R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.625	3.623	0.002	12659 0.02000	0.021		(a)

6	Aroclor-1016		CAS #: 12674-11-2			
5.104	5.101	0.003	8061 0.40000	0.39	80.00- 120.00	100.00(a)
5.875	5.871	0.004	12000 0.40000	0.44	129.39- 169.39	148.86
6.686	6.682	0.004	6955 0.40000	0.41	66.59- 106.59	86.28
Average of Peak Amounts =			0.41333			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.231	10.229	0.002	25499 0.04000	0.040		(a)

8	Aroclor-1260		CAS #: 11096-82-5			
7.972	7.969	0.003	15126 0.40000	0.40	80.00- 120.00	100.00(a)
8.456	8.454	0.002	18764 0.40000	0.42	106.59- 146.59	124.05
8.964	8.962	0.002	22794 0.40000	0.36	151.40- 191.40	150.69
Average of Peak Amounts =			0.39333			

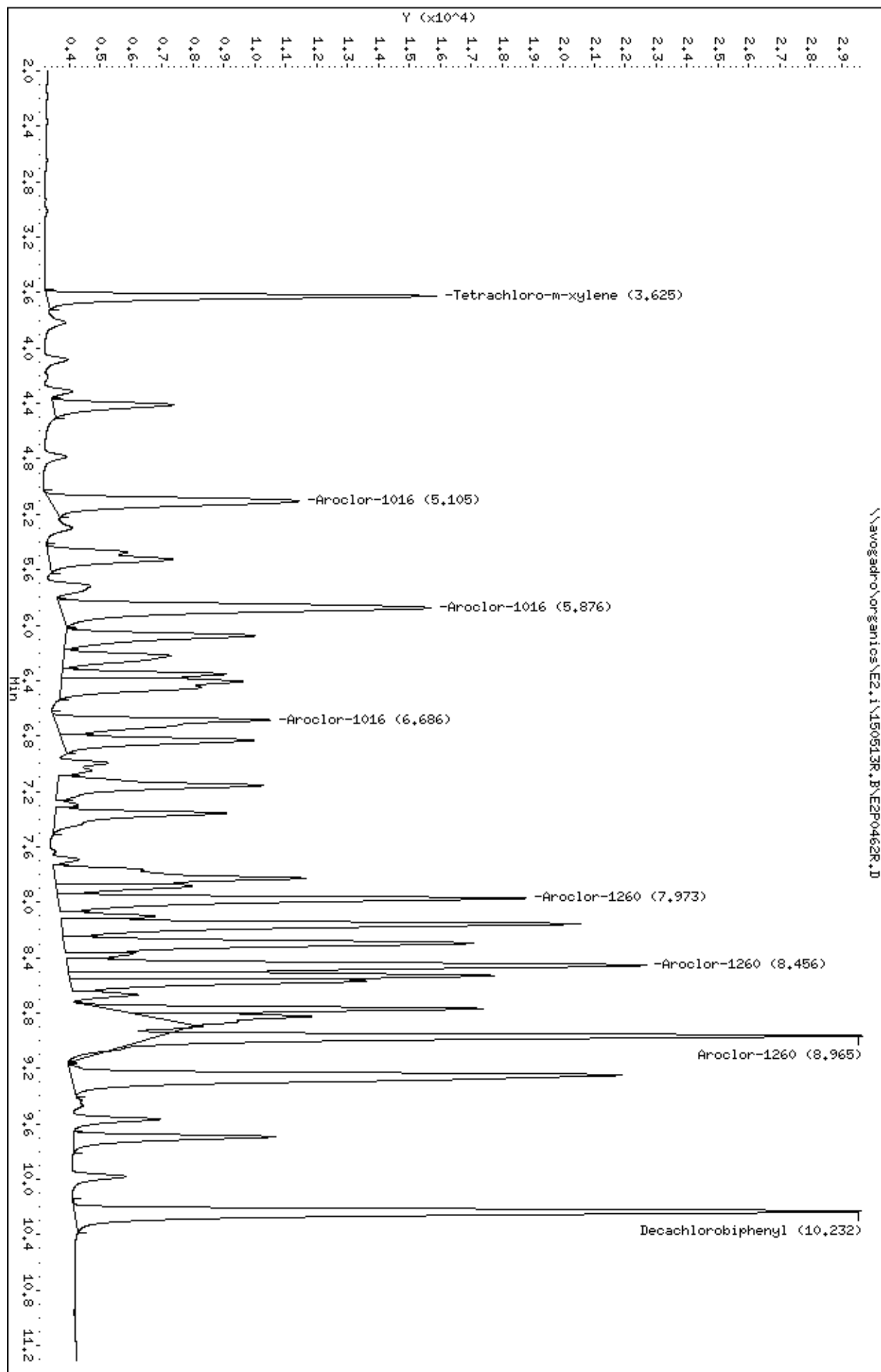
Data File: \\avogadro\organics\E2.i\150513R.B\E2P0462R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513R.B\E2P0462R.D
Date: 13-May-2015 11:06
Client ID: AR16603ED
Sample Info: AR16603ED,AR16603ED,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513F.B\E2P0463F.D
 Lab Smp Id: AR12483ED Client Smp ID: AR12483ED
 Inj Date : 13-MAY-2015 11:20
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483ED,AR12483ED,,ar1248.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.940	2.938	0.002	15351 0.02000	0.021		(a)	

7 Aroclor-1248				CAS #: 12672-29-6			
6.075	6.073	0.002	8850 0.40000	0.46	80.00- 120.00	100.00(a)	
6.337	6.335	0.002	7273 0.40000	0.42	62.70- 102.70	82.18	
6.804	6.803	0.001	4382 0.40000	0.42	29.31- 69.31	49.51	
Average of Peak Amounts =				0.43333			

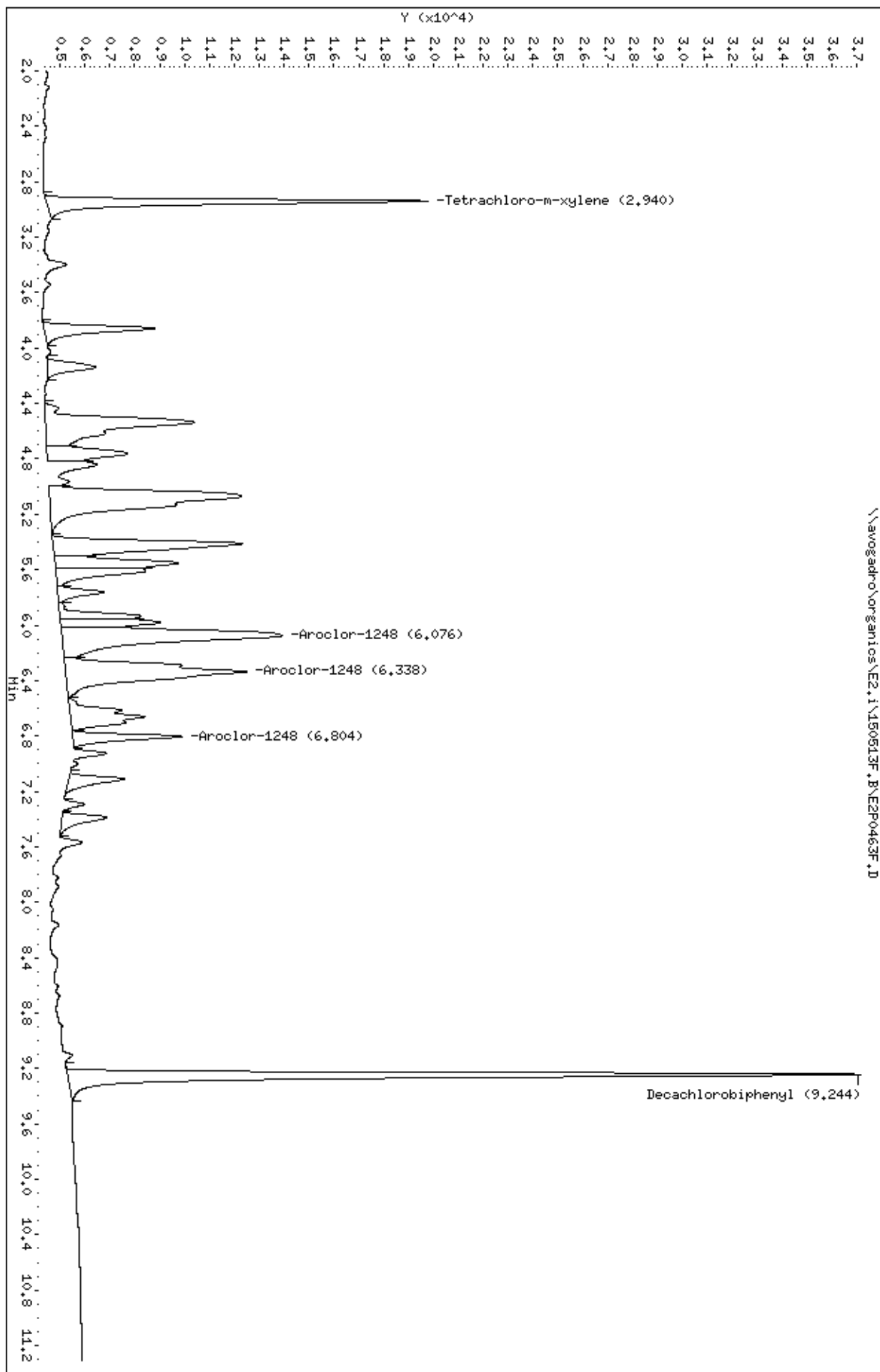
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.243	9.242	0.001	867606 0.04000	0.037		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513F.B\E2P0463F.D
Date: 13-May-2015 11:20
Client ID: AR12483ED
Sample Info: AR12483ED,AR12483ED,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513R.B\E2P0463R.D
 Lab Smp Id: AR12483ED Client Smp ID: AR12483ED
 Inj Date : 13-MAY-2015 11:20
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483ED,AR12483ED,,ar1248.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS								
RT	EXP RT	DLT RT	CAL-AMT		ON-COL	TARGET RANGE		RATIO
=====	=====	=====	RESPONSE (	ng)	(ng)	=====		=====
\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
3.626	3.623	0.003	12662	0.02000	0.021			(a)

5 Aroclor-1248					CAS #: 12672-29-6			
7.049	7.045	0.004	3529	0.40000	0.41	80.00-	120.00	100.00(a)
7.161	7.158	0.003	10385	0.40000	0.41	280.12-	320.12	294.28
7.798	7.796	0.002	5077	0.40000	0.40	126.71-	166.71	143.87
Average of Peak Amounts =					0.40667			

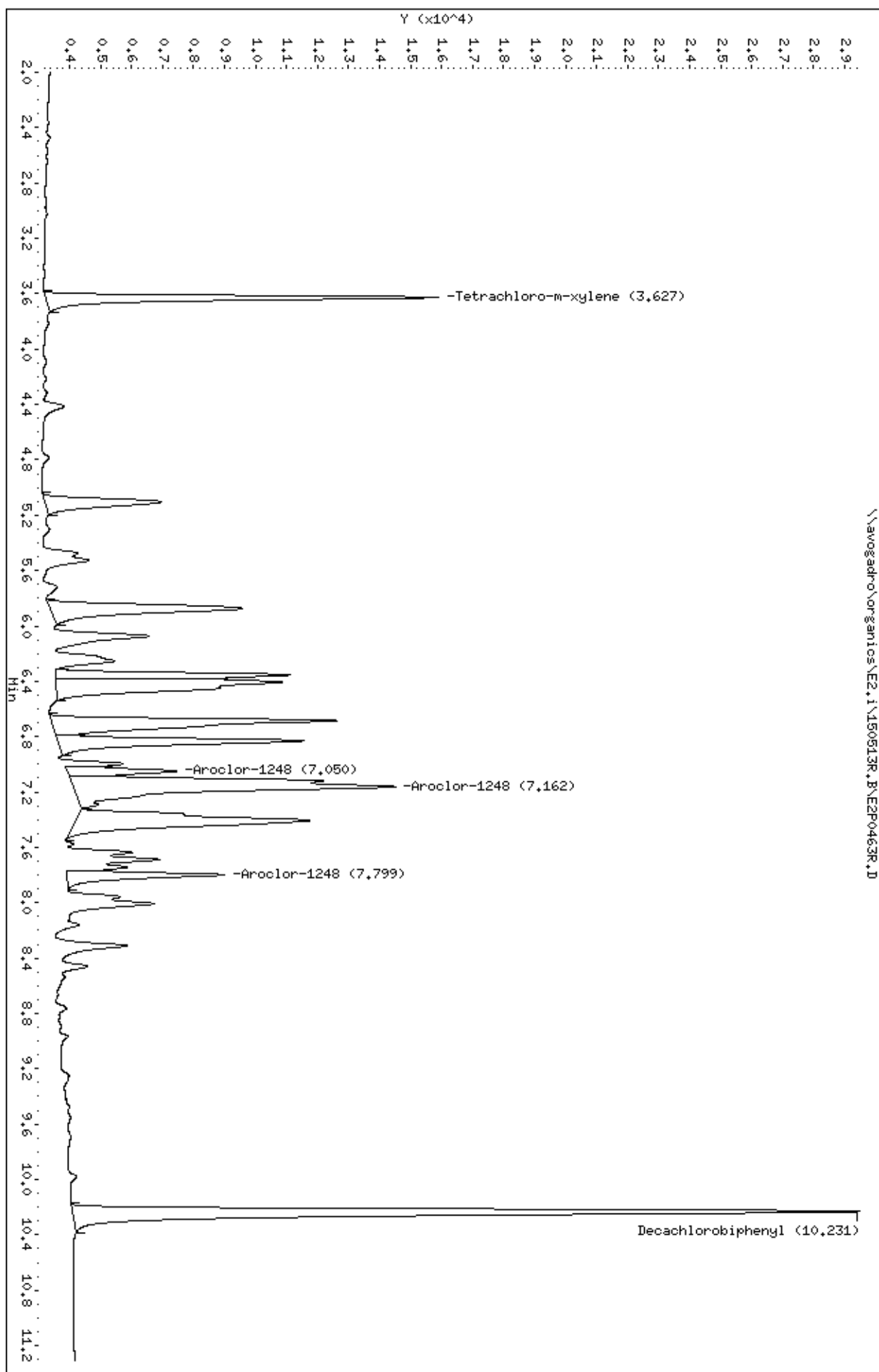
\$ 11 Decachlorobiphenyl					CAS #: 2051-24-3			
10.231	10.229	0.002	25419	0.04000	0.039			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513R.B\E2P0463R.D
Date: 13-May-2015 11:20
Client ID: AR12483ED
Sample Info: AR12483ED,AR12483ED,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513F.B\E2P0466F.D
 Lab Smp Id: AR16603EE Client Smp ID: AR16603EE
 Inj Date : 13-MAY-2015 12:06
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603EE, AR16603EE, , ar1660.sub, ,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 26 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.940	2.938	0.002	15556 0.02000	0.021		(a)

5	Aroclor-1016		CAS #: 12674-11-2			
3.860	3.857	0.003	9553 0.40000	0.40	80.00- 120.00	100.00(a)
4.539	4.536	0.003	11261 0.40000	0.44	97.88- 137.88	117.88
5.555	5.552	0.003	3673 0.40000	0.39	18.45- 58.45	38.45
Average of Peak Amounts =			0.41000			

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.242	9.242	0.000	874887 0.04000	0.037		(a)

9	Aroclor-1260		CAS #: 11096-82-5			
7.293	7.290	0.003	20267 0.40000	0.43	80.00- 120.00	100.00(a)
7.565	7.563	0.002	17584 0.40000	0.44	66.76- 106.76	86.76
8.160	8.159	0.001	26510 0.40000	0.44	110.80- 150.80	130.80
Average of Peak Amounts =			0.43667			

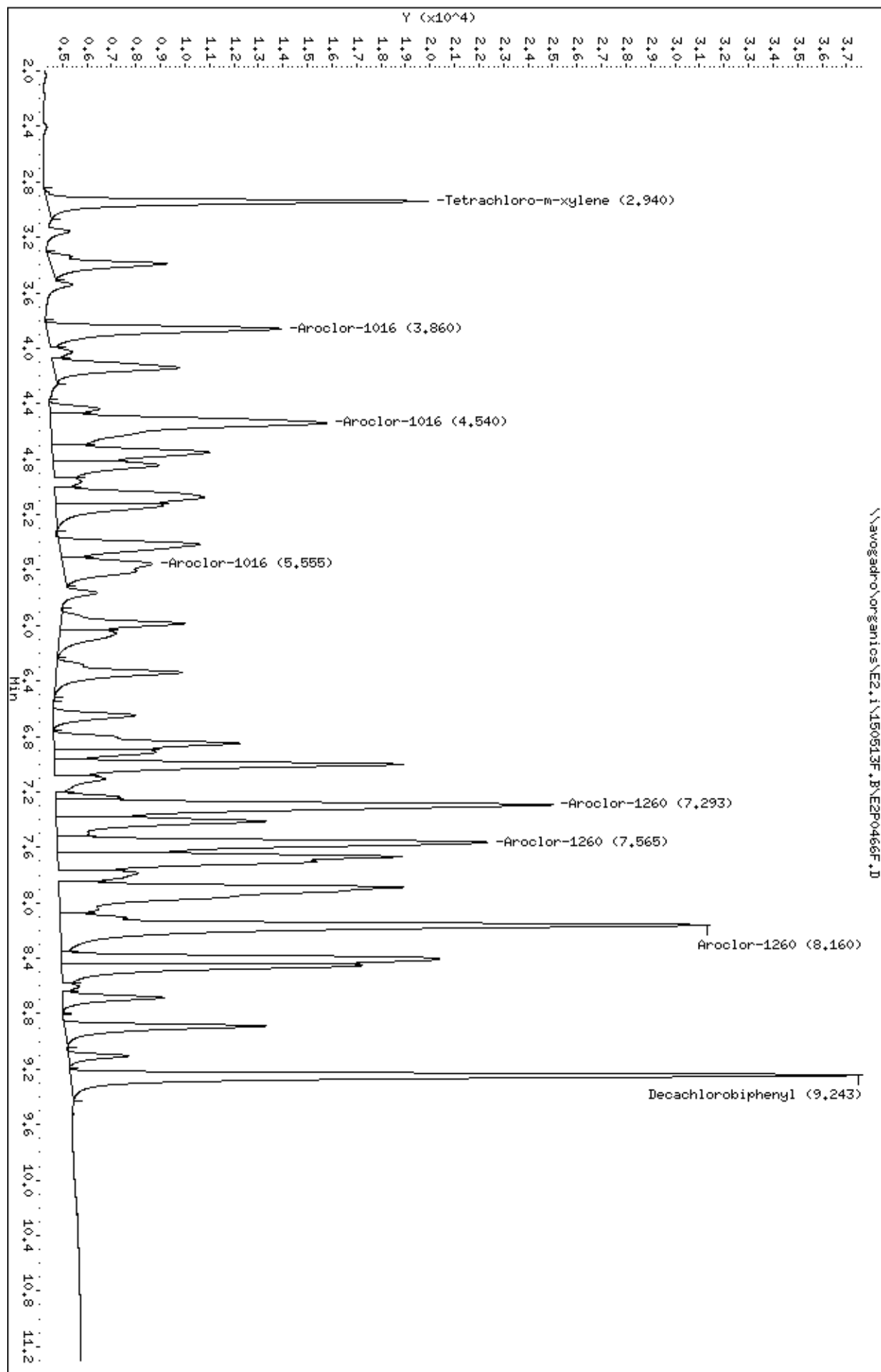
Data File: \\avogadro\organics\E2.i\150513F.B\E2P0466F.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513F.B\E2P0466F.D
 Date: 13-May-2015 12:06
 Client ID: AR16603EE
 Sample Info: AR16603EE,AR16603EE,ar1660,sdk,
 Volume Injected (uL): 1.0
 Column phase: CLPest

Instrument: E2.i
 Operator: JM SRC: JM
 Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513R.B\E2P0466R.D
 Lab Smp Id: AR16603EE Client Smp ID: AR16603EE
 Inj Date : 13-MAY-2015 12:06
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR16603EE, AR16603EE, , ar1660.sub, ,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513R.B\E2_LL_PCB_R.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
 Als bottle: 26 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1660.sub
 Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
3.626	3.623	0.003	12728 0.02000	0.021	(a)		

6 Aroclor-1016				CAS #: 12674-11-2			
5.105	5.101	0.004	8082 0.40000	0.39 80.00-	120.00	100.00(a)	
5.876	5.871	0.005	12074 0.40000	0.44 129.39-	169.39	149.39	
6.686	6.682	0.004	6998 0.40000	0.42 66.59-	106.59	86.59	
Average of Peak Amounts =				0.41667			

\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
10.231	10.229	0.002	26039 0.04000	0.040	(a)		

8 Aroclor-1260				CAS #: 11096-82-5			
7.972	7.969	0.003	15418 0.40000	0.41 80.00-	120.00	100.00(a)	
8.456	8.454	0.002	19517 0.40000	0.43 106.59-	146.59	126.59	
8.964	8.962	0.002	26426 0.40000	0.42 151.40-	191.40	171.40	
Average of Peak Amounts =				0.42000			

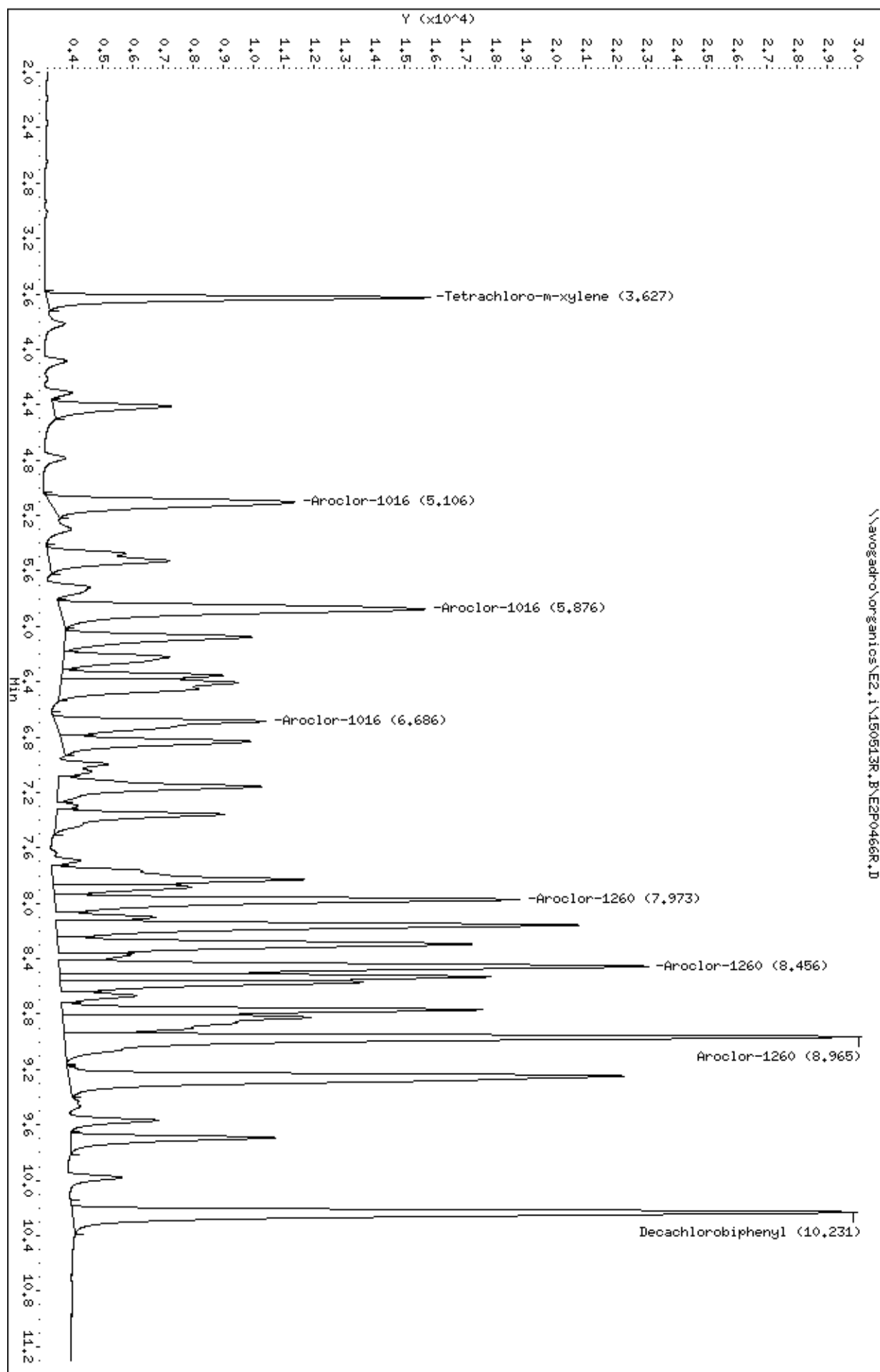
Data File: \\avogadro\organics\E2.i\150513R.B\E2P0466R.D
Report Date: 13-May-2015 17:30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513R.B\E2P0466R.D
Date: 13-MAY-2015 12:06
Client ID: AR16603EE
Sample Info: AR16603EE,AR16603EE,,ar1660,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513F.B\E2P0467F.D
 Lab Smp Id: AR12483EE Client Smp ID: AR12483EE
 Inj Date : 13-MAY-2015 12:21
 Operator : JW SRC: JW Inst ID: E2.i
 Smp Info : AR12483EE, AR12483EE, , ar1248.sub, ,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150513F.B\E2_LL_PCB_F.m
 Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
 Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420F.D
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: ar1248.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS							
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO	
=====	=====	=====	RESPONSE (ng)	(ng)	=====	=====	=====
\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
2.941	2.938	0.003	15217 0.02000	0.020			(a)

7 Aroclor-1248				CAS #: 12672-29-6			
6.078	6.073	0.005	8652 0.40000	0.45	80.00- 120.00	100.00	(a)
6.339	6.335	0.004	7155 0.40000	0.42	62.70- 102.70	82.70	
6.806	6.803	0.003	4266 0.40000	0.41	29.31- 69.31	49.31	
Average of Peak Amounts =				0.42667			

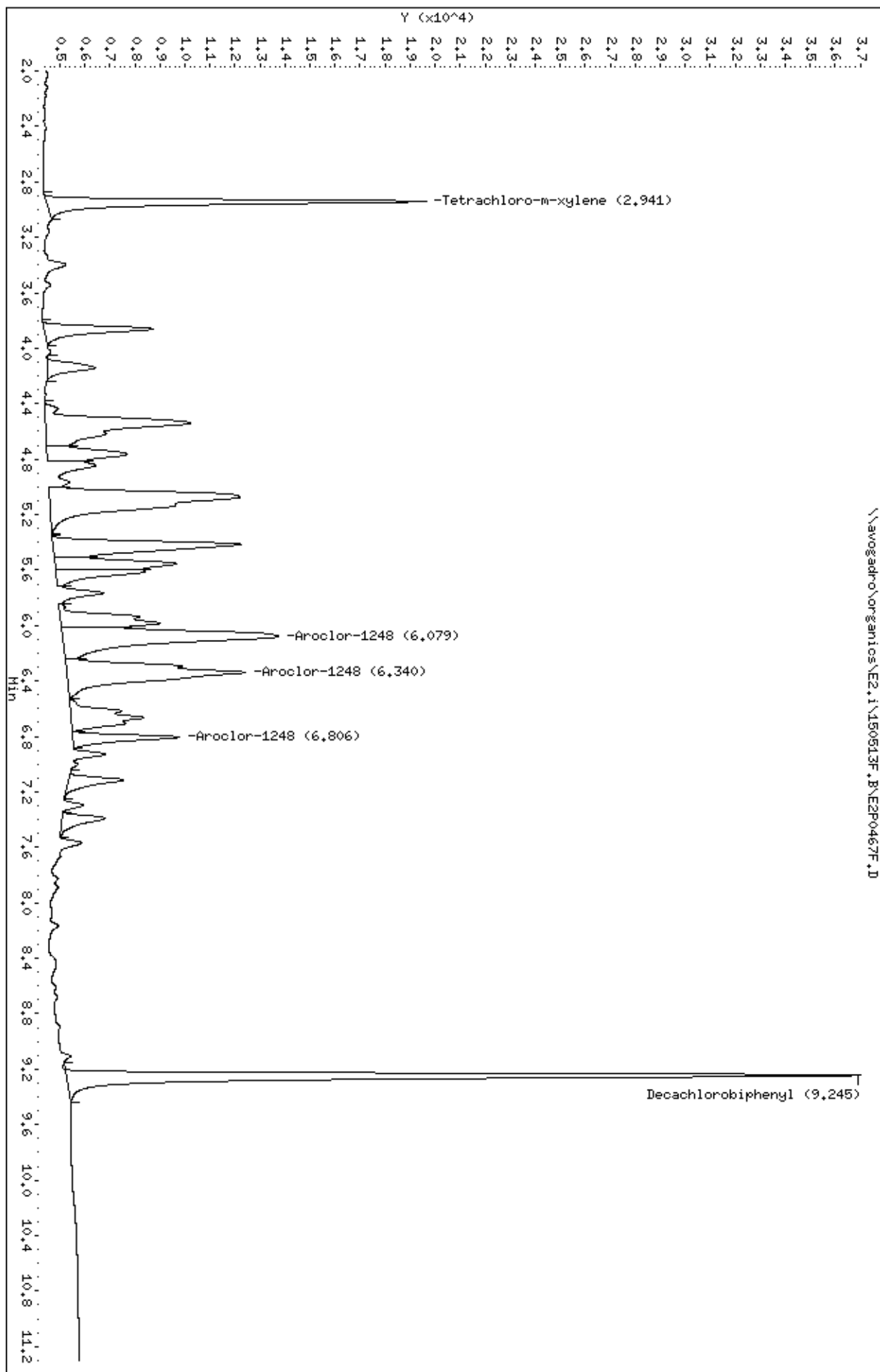
\$ 11 Decachlorobiphenyl				CAS #: 2051-24-3			
9.244	9.242	0.002	864817 0.04000	0.036			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513F.B\E2P0467F.D
Date: 13-May-2015 12:21
Client ID: AR12483EE
Sample Info: AR12483EE,AR12483EE,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150513R.B\E2P0467R.D
Lab Smp Id: AR12483EE Client Smp ID: AR12483EE
Inj Date : 13-MAY-2015 12:21
Operator : JW SRC: JW Inst ID: E2.i
Smp Info : AR12483EE,AR12483EE,,ar1248.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150513R.B\E2_LL_PCB_R.m
Meth Date : 13-May-2015 14:42 E2.i Quant Type: ESTD
Cal Date : 13-MAY-2015 00:17 Cal File: E2P0420R.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ar1248.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ng)	ON-COL (ng)	TARGET RANGE	RATIO
=====						
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
3.626	3.623	0.003	12612 0.02000	0.021		(a)

5	Aroclor-1248		CAS #: 12672-29-6			
7.050	7.045	0.005	3417 0.40000	0.39 80.00- 120.00	100.00(a)	
7.162	7.158	0.004	10255 0.40000	0.41 280.12- 320.12	300.12	
7.799	7.796	0.003	5013 0.40000	0.40 126.71- 166.71	146.71	
Average of Peak Amounts =			0.40000			

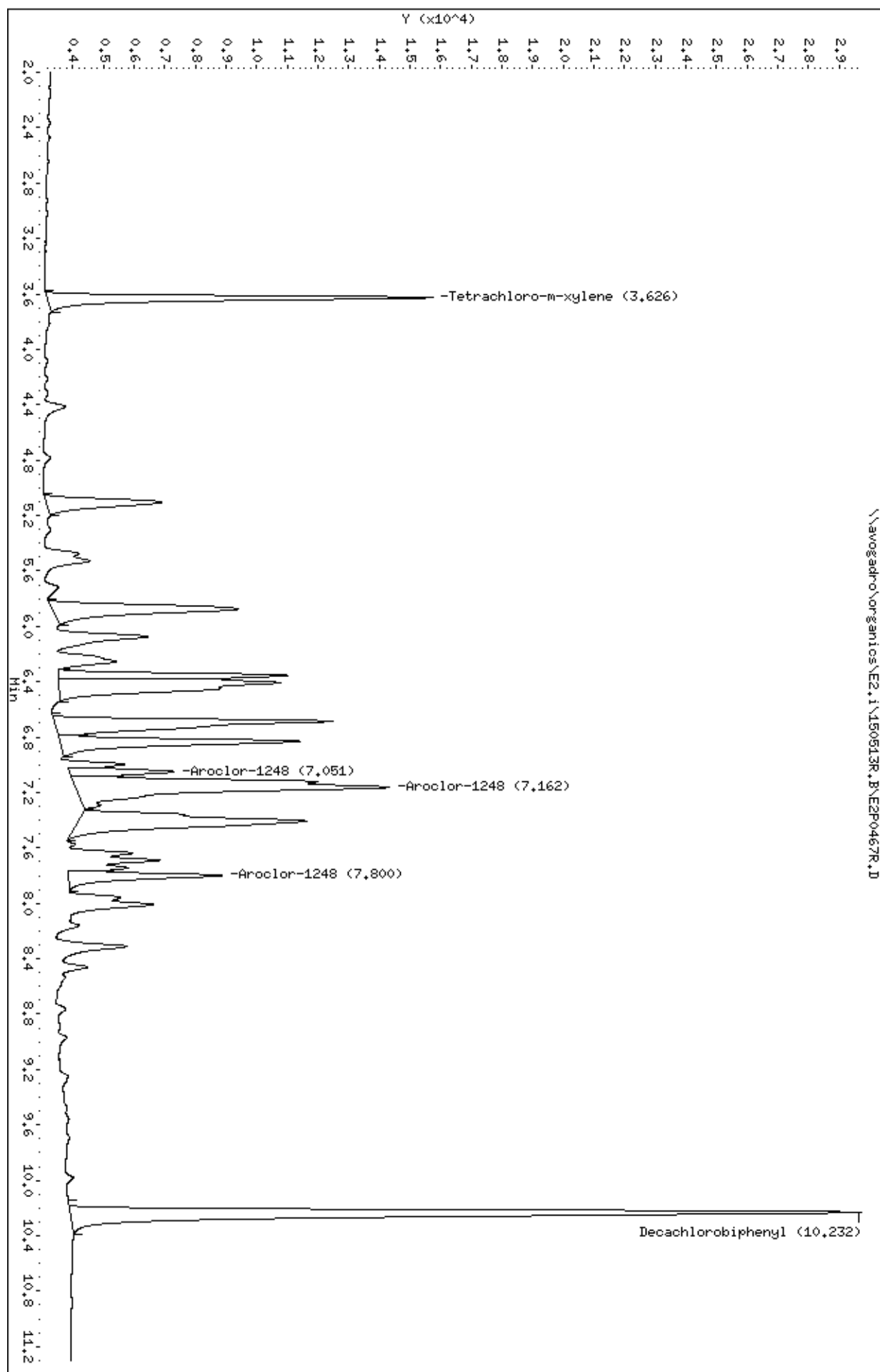
\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
10.231	10.229	0.002	25826 0.04000	0.040		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\avogadro\organics\E2.i\150513R.B\E2P0467R.D
Date: 13-May-2015 12:21
Client ID: AR12483EE
Sample Info: AR12483EE,AR12483EE,,ar1248,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrestII

Instrument: E2.i
Operator: JM SRC: JM
Column diameter: 0.32



1H - FORM I ARO
AROCOLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-81958

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-81958
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0152F.D/E2P0152R.D
% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
Extraction: (Type) SEPF Date Extracted: 04/29/2015
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
Acid Cleanup: (Y/N) Y _____

CAS NO.	COMPOUND	CONCENTRATION UNITS:	Q
		(ug/L or ug/Kg) ug/L	
12674-11-2	Aroclor-1016	0.10	U
11104-28-2	Aroclor-1221	0.10	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.10	U
37324-23-5	Aroclor-1262	0.10	U
11100-14-4	Aroclor-1268	0.10	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0152F.D
 Lab Smp Id: MB-81958 Client Smp ID: MB-81958
 Inj Date : 07-MAY-2015 22:39
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : MB-81958,MB-81958,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 30 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

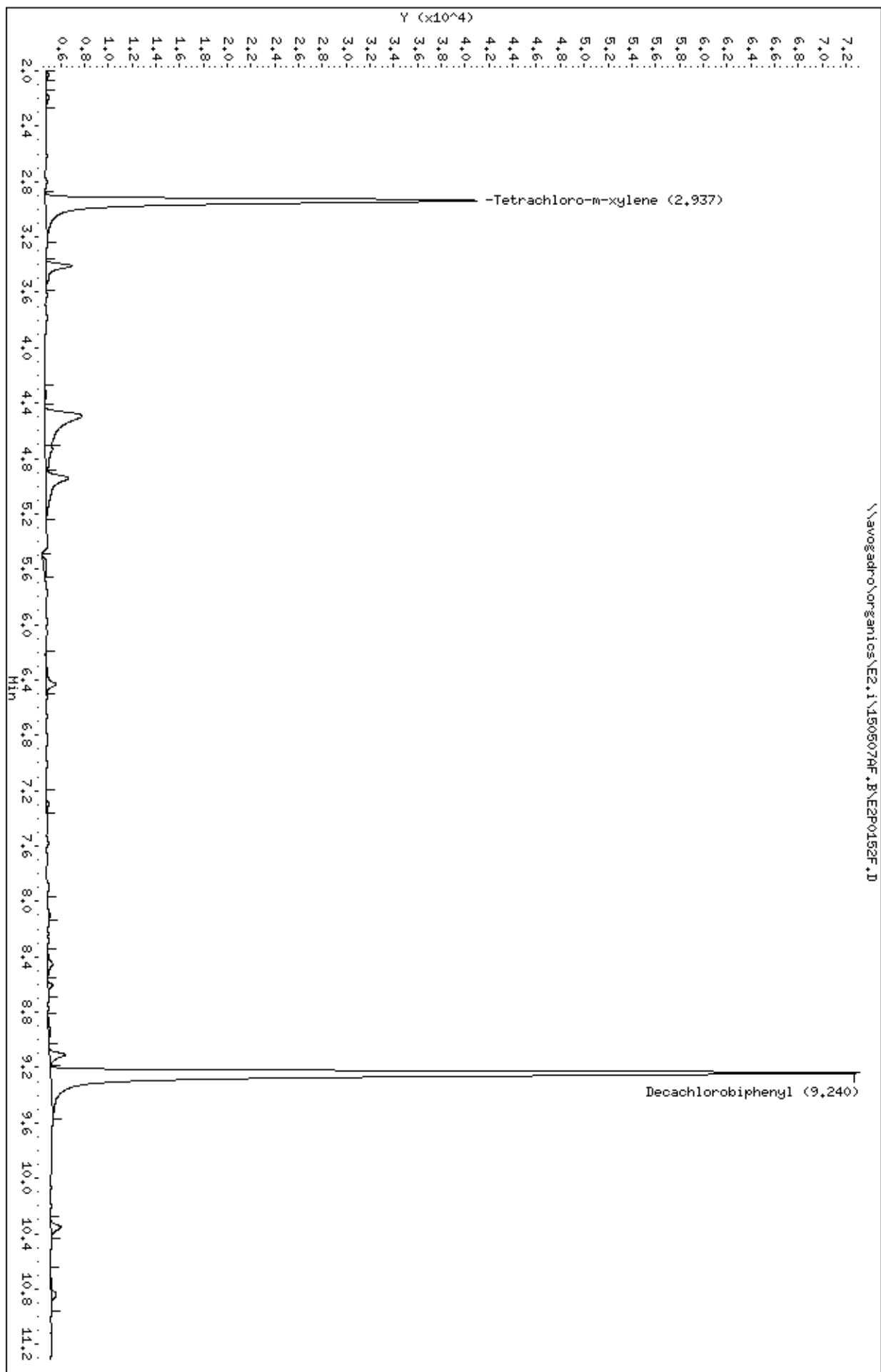
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene		CAS #: 877-09-8			
2.937	2.936	0.001	36240	0.04689	0.047	

\$ 11	Decachlorobiphenyl		CAS #: 2051-24-3			
9.239	9.241	-0.002	1929817	0.08195	0.082	

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0152F.D
Date : 07-MAY-2015 22:39
Client ID: MB-81958
Sample Info: MB-81958,MB-81958,81958,8082A.sub.,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0152R.D
 Lab Smp Id: MB-81958 Client Smp ID: MB-81958
 Inj Date : 07-MAY-2015 22:39
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : MB-81958,MB-81958,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 30 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

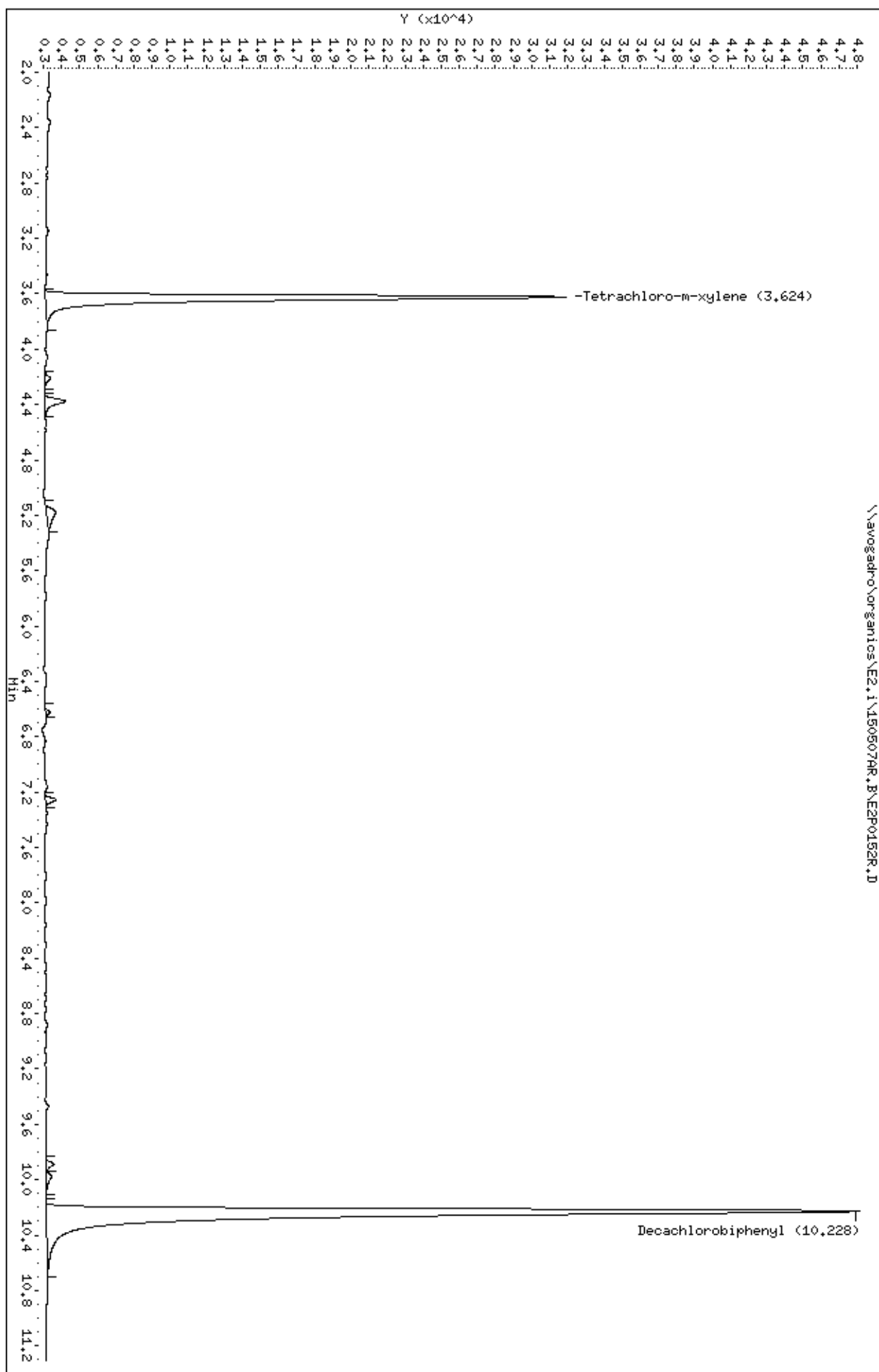
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
		ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1	Tetrachloro-m-xylene				CAS #: 877-09-8	
3.624	3.623	0.001	28850	0.05096	0.051	

\$ 11	Decachlorobiphenyl				CAS #: 2051-24-3	
10.228	10.227	0.001	45003	0.09513	0.095	

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0152R.D
Date : 07-MAY-2015 22:39
Client ID: MB-81958
Sample Info: MB-81958,MB-81958,81958,8082A.sub.,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7MS(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-08AMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0162F.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
12674-11-2	Aroclor-1016	0.52	
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.30	
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7MS(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-08AMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0162R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.43	
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.32	
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0162F.D
Lab Smp Id: P0667-08AMS Client Smp ID: MW-7MS
Inj Date : 08-MAY-2015 01:04
Operator : JW SRC: LIMS Inst ID: E2.i
Smp Info : P0667-08AMS,,81958,8082A.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8							
2.937	2.936	0.001	31155	0.04031	0.040		

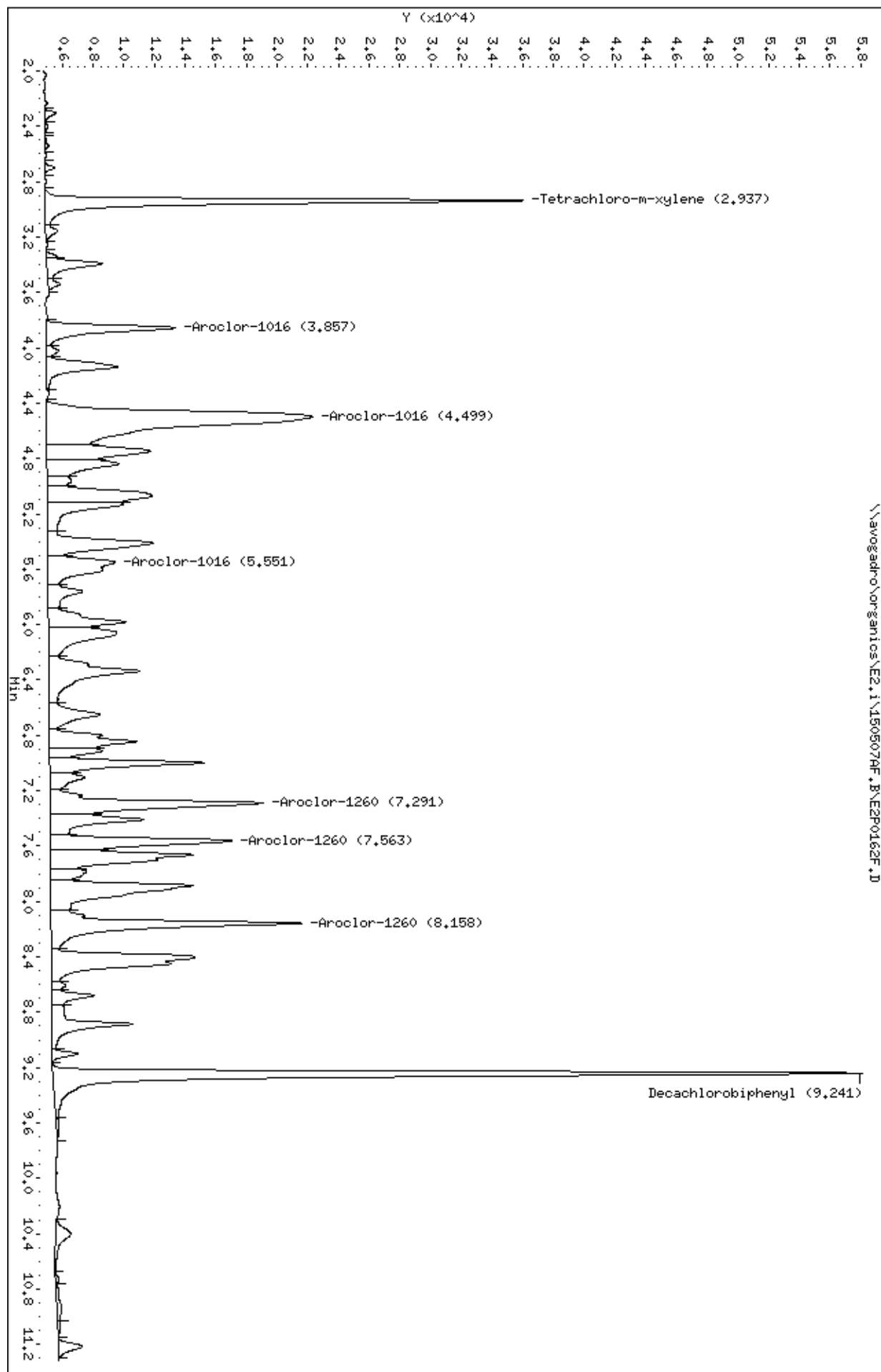
5 Aroclor-1016 CAS #: 12674-11-2							
3.857	3.855	0.002	8447	0.33936	0.34	80.00- 120.00	100.00
4.498	4.534	-0.036	17333	0.75886	0.76	83.39- 123.39	205.20
5.551	5.551	0.000	4408	0.45199	0.45	23.00- 63.00	52.18
Average of Peak Concentrations =					0.52		

9 Aroclor-1260 CAS #: 11096-82-5							
7.290	7.289	0.001	13884	0.30466	0.30	80.00- 120.00	100.00
7.562	7.562	0.000	11811	0.30948	0.31	66.20- 106.20	85.07
8.157	8.157	0.000	16294	0.28970	0.29	108.17- 148.17	117.36
Average of Peak Concentrations =					0.30		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3							
9.241	9.241	0.000	1521260	0.06460	0.064		

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0162F.D
Date : 08-MAY-2015 01:04
Client ID: MM-7HS
Sample Info: P0667-08AHS,,81958,8082A,sub,,
Volume Injected (uL): 1.0
Column phase: CLPest

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0162R.D
Lab Smp Id: P0667-08AMS Client Smp ID: MW-7MS
Inj Date : 08-MAY-2015 01:04
Operator : JW SRC: LIMS Inst ID: E2.i
Smp Info : P0667-08AMS,,81958,8082A.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
Als bottle: 40 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.622	3.623	-0.001	25262 0.04462	0.045		

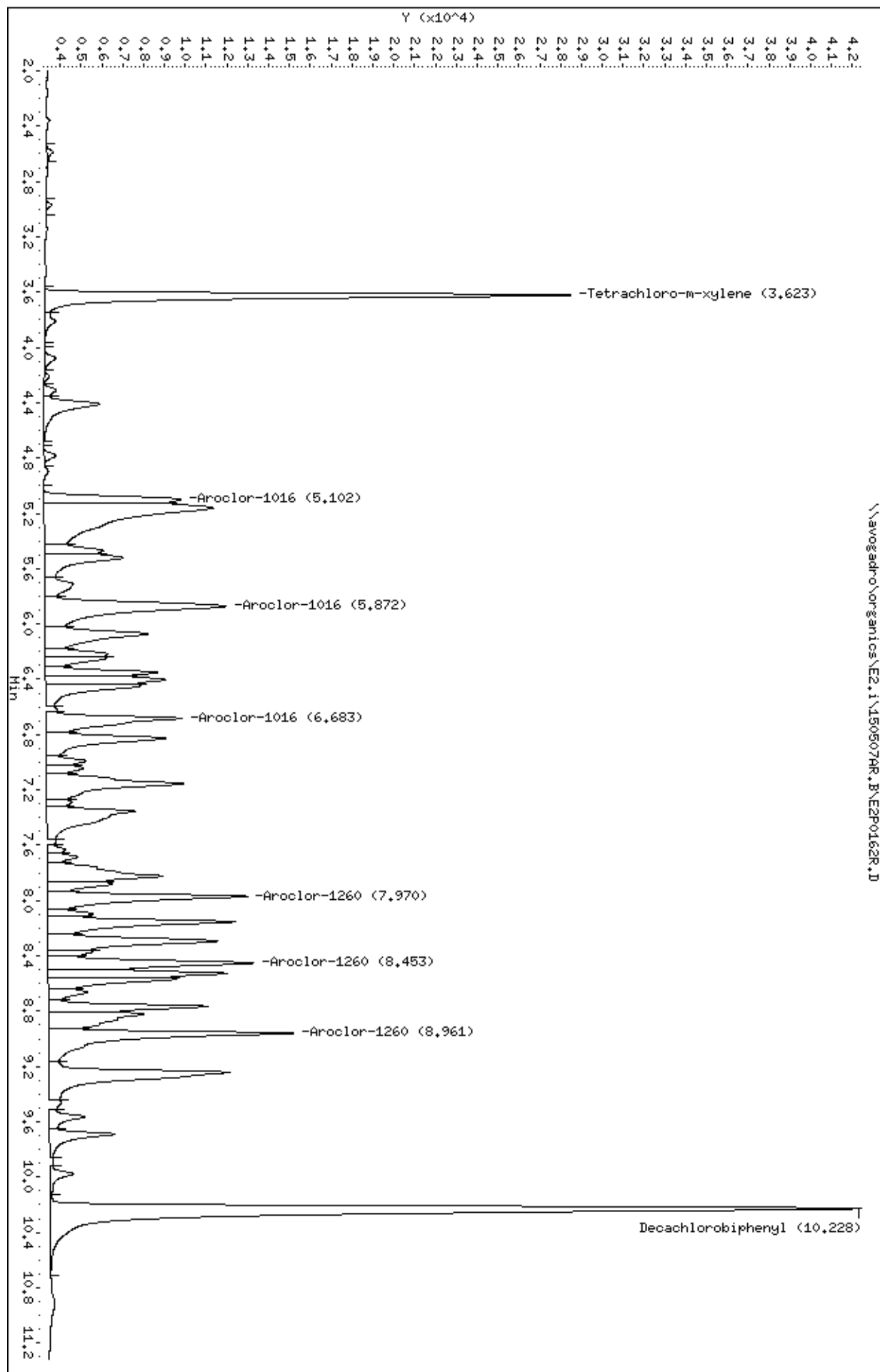
6 Aroclor-1016 CAS #: 12674-11-2						
5.101	5.100	0.001	6541 0.35391	0.35	80.00- 120.00	100.00
5.872	5.871	0.001	8670 0.44970	0.45	90.59- 130.59	132.55
6.682	6.681	0.001	6504 0.47233	0.47	58.70- 98.70	99.43
Average of Peak Concentrations =				0.42		

8 Aroclor-1260 CAS #: 11096-82-5						
7.969	7.968	0.001	9590 0.31075	0.31	80.00- 120.00	100.00
8.452	8.450	0.002	9870 0.33410	0.33	80.01- 120.01	102.92
8.961	8.958	0.003	11722 0.30124	0.30	105.59- 145.59	122.23
Average of Peak Concentrations =				0.32		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.228	10.227	0.001	38925 0.08228	0.082		

Data File: \\avogadro\organics\E2.i\150507HR.B\EP0162R.D
Date: 08-MAY-2015 01:04
Client ID: MM-7HS
Sample Info: P0667-08AHS,,81958,80824,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7MSD(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-08AMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0163F.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.38	
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.34	
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7MSD(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: P0667-08AMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0163R.D

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 04/25/2015

Extraction: (Type) SEPF Date Extracted: 04/29/2015

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/08/2015

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.40	
11104-28-2	Aroclor-1221	0.050	U
11141-16-5	Aroclor-1232	0.050	U
53469-21-9	Aroclor-1242	0.050	U
12672-29-6	Aroclor-1248	0.050	U
11097-69-1	Aroclor-1254	0.050	U
11096-82-5	Aroclor-1260	0.37	
37324-23-5	Aroclor-1262	0.050	U
11100-14-4	Aroclor-1268	0.050	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0163F.D
 Lab Smp Id: P0667-08AMSD Client Smp ID: MW-7MSD
 Inj Date : 08-MAY-2015 01:19
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : P0667-08AMSD,,81958,8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 41 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8							
2.937	2.936	0.001	35318	0.04569	0.046		

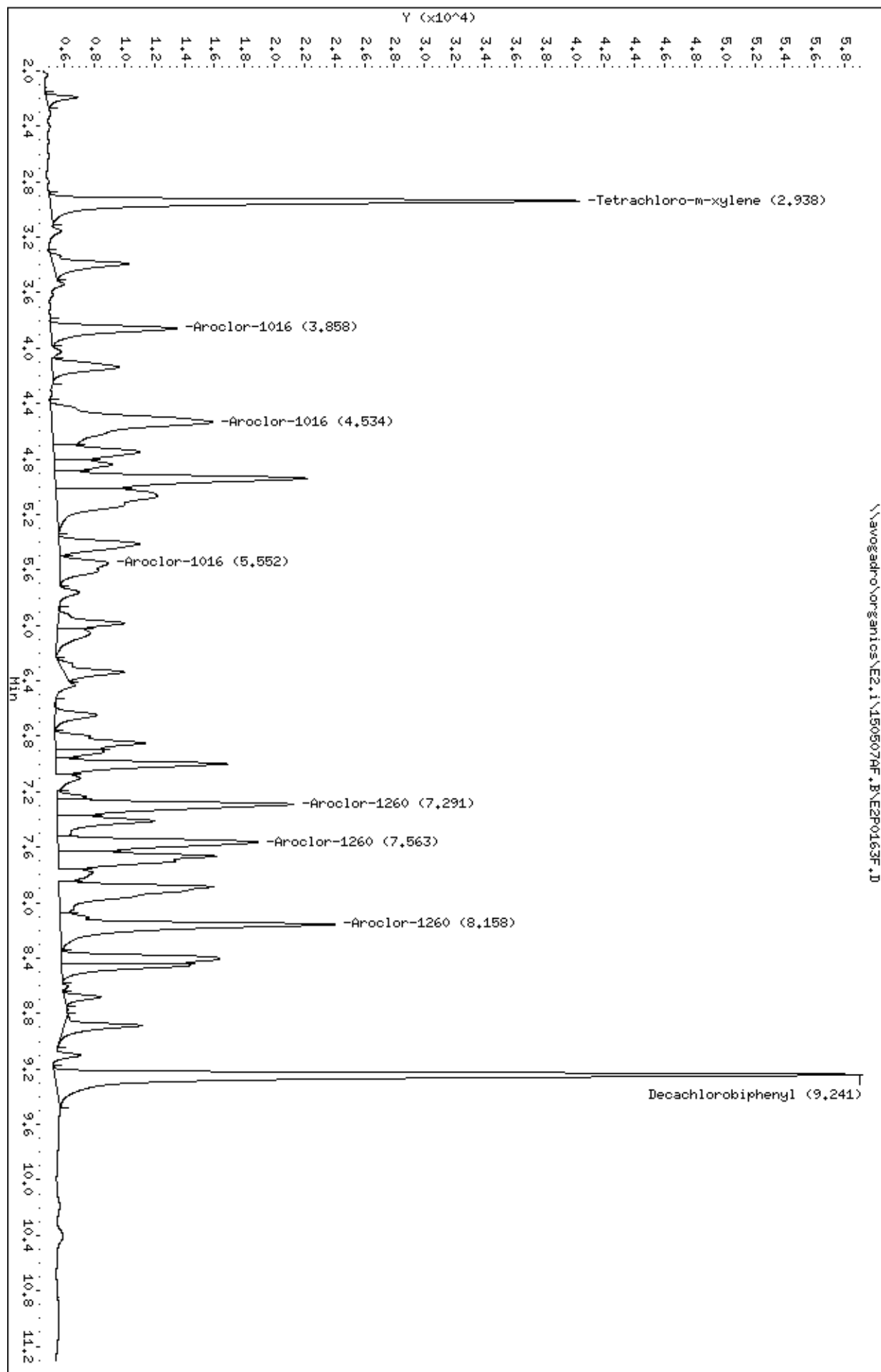
5 Aroclor-1016						CAS #: 12674-11-2	
3.858	3.855	0.003	8380	0.33667	0.34	80.00- 120.00	100.00
4.534	4.534	0.000	10770	0.47152	0.47	83.39- 123.39	128.52
5.552	5.551	0.001	3262	0.33448	0.33	23.00- 63.00	38.93
Average of Peak Concentrations =					0.38		

9 Aroclor-1260						CAS #: 11096-82-5	
7.290	7.289	0.001	15804	0.34679	0.35	80.00- 120.00	100.00
7.563	7.562	0.001	13295	0.34837	0.35	66.20- 106.20	84.12
8.157	8.157	0.000	18328	0.32586	0.32	108.17- 148.17	115.97
Average of Peak Concentrations =					0.34		

\$ 11 Decachlorobiphenyl						CAS #: 2051-24-3	
9.240	9.241	-0.001	1546875	0.06569	0.066		

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0163F.D
Date : 08-MAY-2015 01:19
Client ID: MM-7HSD
Sample Info: P0667-08AHSD, 81958, 8082A, sub.,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0163R.D
Lab Smp Id: P0667-08AMSD Client Smp ID: MW-7MSD
Inj Date : 08-MAY-2015 01:19
Operator : JW SRC: LIMS Inst ID: E2.i
Smp Info : P0667-08AMSD,,81958,8082A.sub,,
Misc Info : 2,3,,1
Comment :
Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
Als bottle: 41 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: 8082A.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE (ng)	ON-COL FINAL (ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8						
3.623	3.623	0.000	29047 0.05131	0.051		

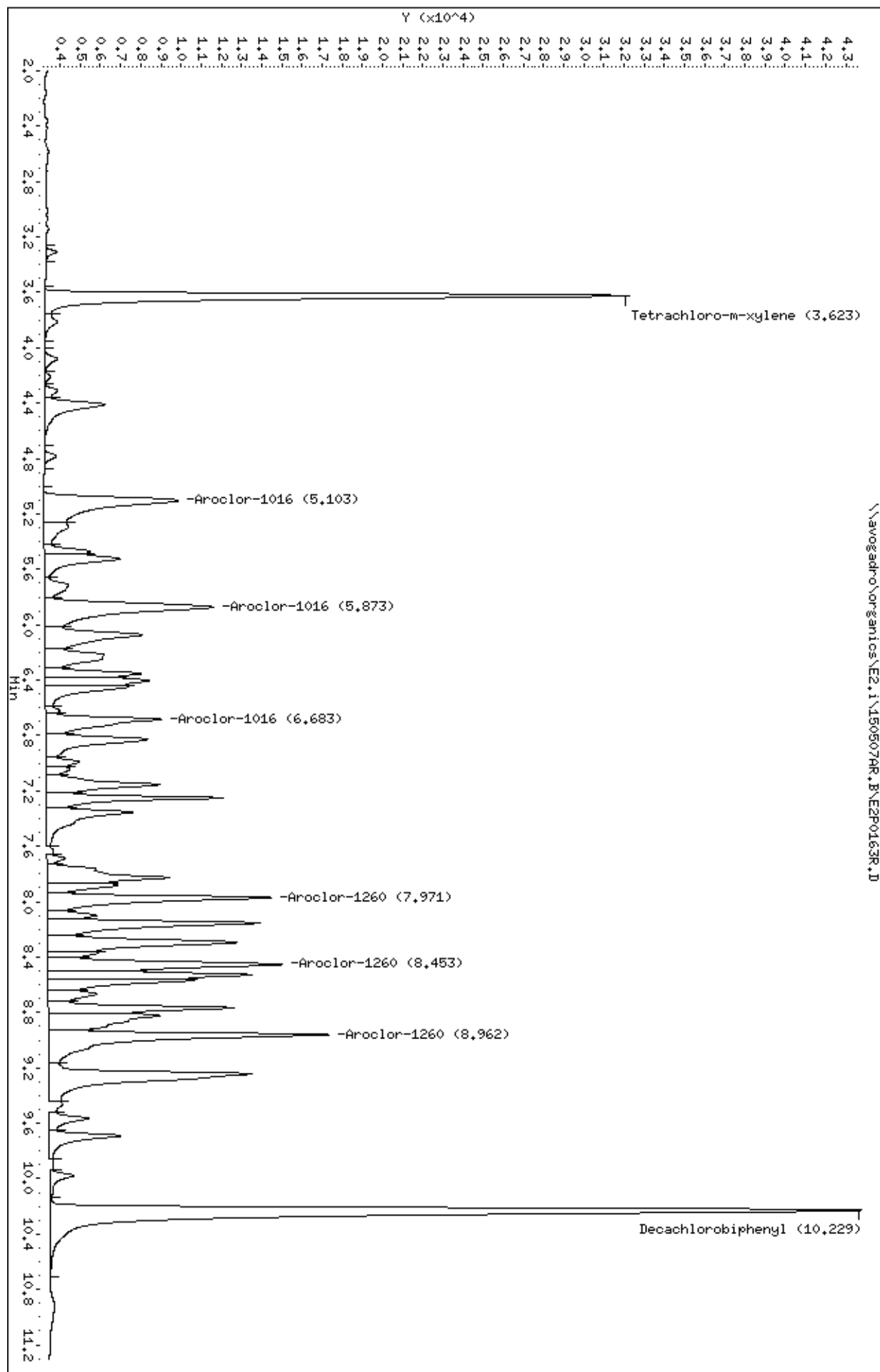
6 Aroclor-1016 CAS #: 12674-11-2						
5.103	5.100	0.003	6687 0.36181	0.36	80.00- 120.00	100.00
5.873	5.871	0.002	8369 0.43409	0.43	90.59- 130.59	125.15
6.683	6.681	0.002	5765 0.41866	0.42	58.70- 98.70	86.21
Average of Peak Concentrations =				0.40		

8 Aroclor-1260 CAS #: 11096-82-5						
7.970	7.968	0.002	11133 0.36075	0.36	80.00- 120.00	100.00
8.452	8.450	0.002	11644 0.39415	0.39	80.01- 120.01	104.59
8.961	8.958	0.003	13908 0.35742	0.36	105.59- 145.59	124.93
Average of Peak Concentrations =				0.37		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3						
10.229	10.227	0.002	40323 0.08524	0.085		

Data File: \\avogadro\organics\E2,i\150507AR,B\E2P0163R.D
Date: 08-MAY-2015 01:19
Client ID: MW-7MSD
Sample Info: P0667-08AHSD, 81958, 8082A, sub.,
Volume Injected (uL): 1.0
Column phase: CLP-PestII

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-81958(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-81958
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0153F.D
% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
Extraction: (Type) SEPF Date Extracted: 04/29/2015
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
Acid Cleanup: (Y/N) Y _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.40	
11104-28-2	Aroclor-1221	0.10	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.38	
37324-23-5	Aroclor-1262	0.10	U
11100-14-4	Aroclor-1268	0.10	U

1H - FORM I ARO
AROCOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-81958(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: P0667 Mod. Ref No.: _____ SDG No.: SP0667
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-81958
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E2P0153R.D
% Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
Extraction: (Type) SEPF Date Extracted: 04/29/2015
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/07/2015
Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
Acid Cleanup: (Y/N) Y _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	0.37	
11104-28-2	Aroclor-1221	0.10	U
11141-16-5	Aroclor-1232	0.10	U
53469-21-9	Aroclor-1242	0.10	U
12672-29-6	Aroclor-1248	0.10	U
11097-69-1	Aroclor-1254	0.10	U
11096-82-5	Aroclor-1260	0.37	
37324-23-5	Aroclor-1262	0.10	U
11100-14-4	Aroclor-1268	0.10	U

Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AF.B\E2P0153F.D
 Lab Smp Id: LCS-81958 Client Smp ID: LCS-81958
 Inj Date : 07-MAY-2015 22:54
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : LCS-81958, LCS-81958, 81958, 8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AF.B\E2_LL_PCB_F.m
 Meth Date : 11-May-2015 15:38 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145F.D
 Als bottle: 31 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8							
2.936	2.936	0.000	42065	0.05442	0.054		

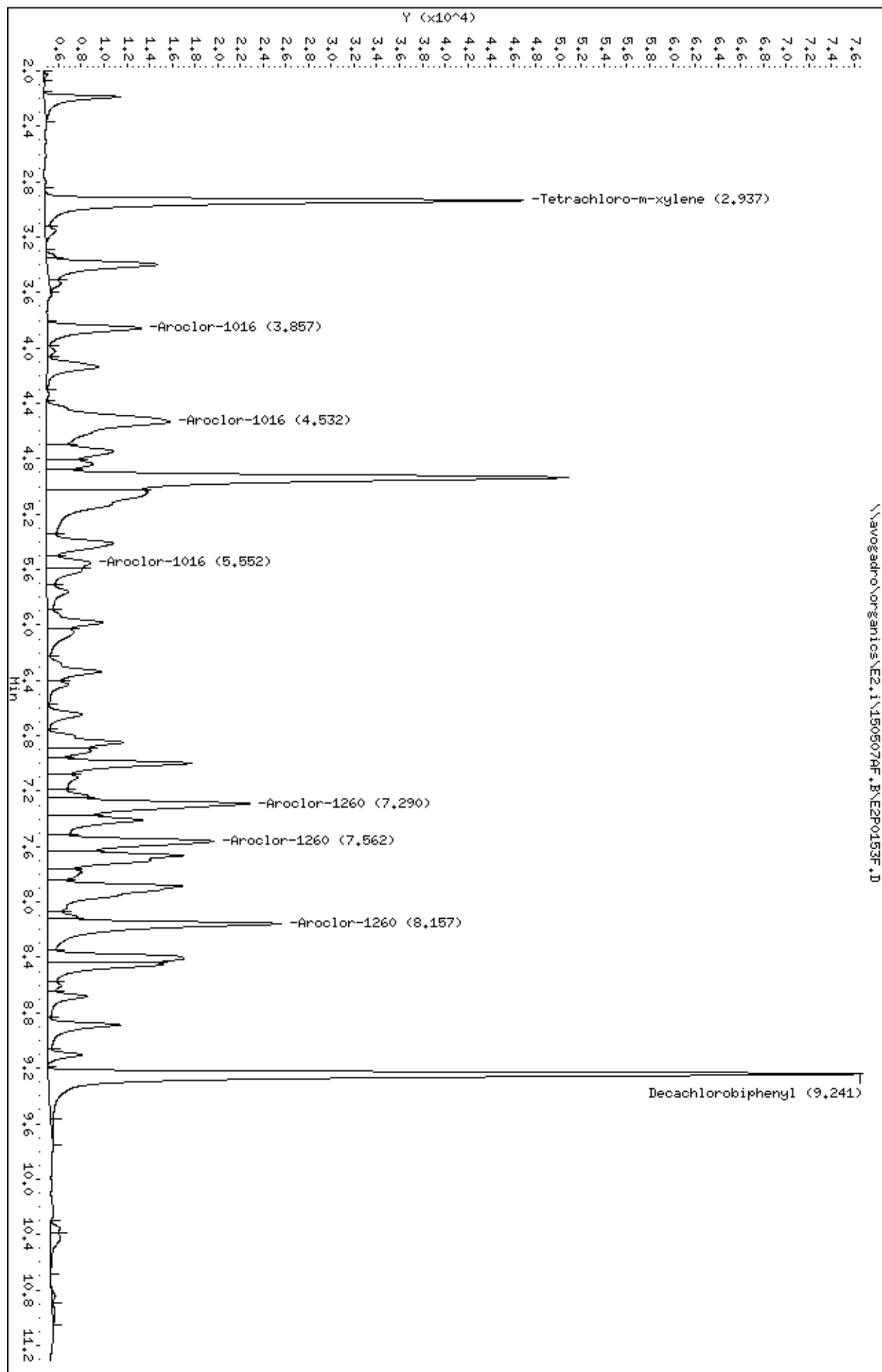
5 Aroclor-1016 CAS #: 12674-11-2							
3.857	3.855	0.002	8277	0.33253	0.33	80.00- 120.00	100.00
4.531	4.534	-0.003	10834	0.47432	0.47	83.39- 123.39	130.89
5.551	5.551	0.000	3850	0.39477	0.39	23.00- 63.00	46.51
Average of Peak Concentrations =					0.40		

9 Aroclor-1260 CAS #: 11096-82-5							
7.290	7.289	0.001	17790	0.39037	0.39	80.00- 120.00	100.00
7.562	7.562	0.000	14648	0.38382	0.38	66.20- 106.20	82.34
8.157	8.157	0.000	20625	0.36670	0.37	108.17- 148.17	115.94
Average of Peak Concentrations =					0.38		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3							
9.240	9.241	-0.001	2087098	0.08863	0.089		

Data File: \\avogadro\organics\E2,i\150507HF.B\EP0153F.D
Date : 07-MAY-2015 22:54
Client ID: LCS-81958
Sample Info: LCS-81958,LCS-81958,81958,80824,sub,,
Volume Injected (uL): 1.0
Column phase: CLPrest

Instrument: E2.i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division

Quantitation Report

Data file : \\avogadro\organics\E2.i\150507AR.B\E2P0153R.D
 Lab Smp Id: LCS-81958 Client Smp ID: LCS-81958
 Inj Date : 07-MAY-2015 22:54
 Operator : JW SRC: LIMS Inst ID: E2.i
 Smp Info : LCS-81958, LCS-81958, 81958, 8082A.sub,,
 Misc Info : 2,3,,1
 Comment :
 Method : \\avogadro\organics\E2.i\150507AR.B\E2_LL_PCB_R.m
 Meth Date : 11-May-2015 15:39 jwarner Quant Type: ESTD
 Cal Date : 07-MAY-2015 20:58 Cal File: E2P0145R.D
 Als bottle: 31 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: 8082A.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET113

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi}) * \text{CpndVariable}$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (ml)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene CAS #: 877-09-8							
3.622	3.623	-0.001	33873	0.05983	0.060		

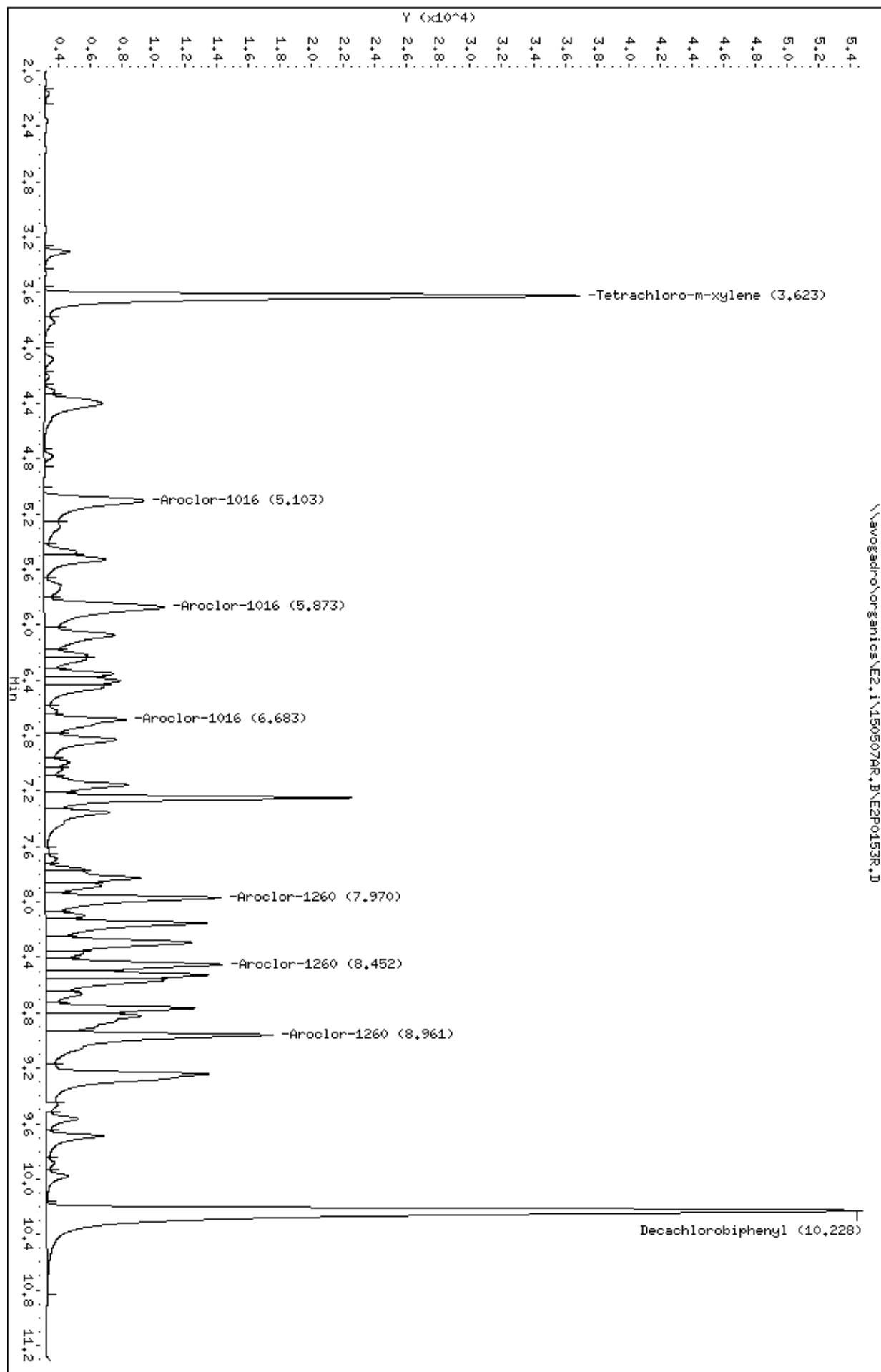
6 Aroclor-1016 CAS #: 12674-11-2							
5.102	5.100	0.002	6320	0.34195	0.34	80.00- 120.00	100.00
5.873	5.871	0.002	7584	0.39337	0.39	90.59- 130.59	120.00
6.682	6.681	0.001	5170	0.37545	0.38	58.70- 98.70	81.80
Average of Peak Concentrations =					0.37		

8 Aroclor-1260 CAS #: 11096-82-5							
7.970	7.968	0.002	11024	0.35722	0.36	80.00- 120.00	100.00
8.451	8.450	0.001	11109	0.37604	0.38	80.01- 120.01	100.77
8.960	8.958	0.002	14304	0.36760	0.37	105.59- 145.59	129.75
Average of Peak Concentrations =					0.37		

\$ 11 Decachlorobiphenyl CAS #: 2051-24-3							
10.228	10.227	0.001	51564	0.10900	0.11		

Data File: \\avogadro\organics\E2,i\150507HR,B\E2P0153R.D
Date : 07-MAY-2015 22:54
Client ID: LCS-81958
Sample Info: LCS-81958,LCS-81958,81958,80824,sub,,
Volume Injected (uL): 1.0
Column phase: CLPestII

Instrument: E2,i
Operator: JM SRC: LIMS
Column diameter: 0.32



Spectrum Analytical, Inc. RI Division ORGANIC PREP-SAMPLE PREPARATION:PEST/PCB

Prep **Matrix:** Aqueous **Soil** **Wipe** **Oil** **BATCH** **Date/Time Started:**
Prep Start Date: 04/29/2015 13:00 **AN:** 3510C (SepF) 3520C (Lia/Liq) **Soil:** 3550B,C (Sone) 3540C
Prep End Date: 05/04/2015 12:15 **Prep Code:** PCB_W_PR **Prep Type:** SEPF/SW3510C
Prep Batch ID: 81958 **Technician:** Devin M Pierel

QC Matrix: NA2SO4 **Solvent (1):** MEGL2 **Misc (2):** N/A **Clean Up (1):** N/A **Clean Up (3):** N/A
QC Matrix Lot: 140933 **Solvent (1) Lot:** DM203 **Misc (2) Lot:** N/A **Clean Up (1) Lot:** N/A
Filter?: FILTER **Solvent (2):** HEXANE **Misc (3):** N/A **Clean Up (2):** N/A **Clean Up (4):** N/A
Filter Lot: 96005041 **Solvent (2) Lot:** DK644 **Misc (3) Lot:** N/A **Clean Up (2) Lot:** N/A **Clean Up (4) Lot:** N/A
Balance ID: N/A **Start Time:** N/A **End Time:** N/A **Sonicator Tuned?** N/A **Bath Temp1 (C):** N/A **Therm ID1:** N/A
Cycles/Hour: 0 **BalanceID:** N/A **Corr Fac:** N/A **Corrected Temp:** N/A

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	SONC / pH
MB-81958	BatchQC		1000	1	OPW150324A	0.1			DMP		05/04/15	01	05/04/15	JEL	R21	7	>11 <2
CLEAN UP (MB-81958): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
LCS-81958	BatchQC		1000	1	OPW150324A	0.1	OPW150212A	0.1	DMP		05/04/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (LCS-81958): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
P0667-01A	MW-4	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-01A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-02A	DUP-X	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-02A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-03A	MW-6	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-03A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-04A	MW-2R	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-04A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-05A	MW-3	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-05A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-06A	MW-1	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-06A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-07A	MW-5	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-07A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	
P0667-08A	MW-7	A	1000	1	OPW150324A	0.1			DMP		05/14/15	01	05/04/15	JEL	R21	7	N/A / Turbo Vap.1
CLEAN UP (P0667-08A): SW3665A/ACID_150504A (LOT: B00P5448) / tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V) / tmcDaniel																	
FV = 1mL																	

Spectrum Analytical, Inc. RI Division ORGANIC PREP-SAMPLE PREPARATION:PEST/PCB

P0667

Date:	Prep Method	Aq: 3510C (SepF) 3520C (Liq/Liq) Soil: 3550B,C (Sonic) 3540C (Soxhlet) 3570(MSE) Other:	BATCH ID:	Date/Time Started:
Analyst	Spiked By	Witness	Analysis:	Date/Time Ended:
			Florissil Lot #	
			Lot/GPC Batch Number	
			ACID	
			SULFUR	

Prep Start Date: 04/29/2015 13:00

Prep End Date: 05/04/2015 12:15

Prep Batch ID: 81958

Prep Code: PCB_W_PR
Technician: Devin M Piere

Prep Type: SEPF/SW3510C

Prep Factor Units:
mL / mL

QC Matrix: NA2SO4	Solvent (1): MECL2	Misc (2): N/A	Clean Up (1): N/A	Clean Up (3): N/A
QC Matrix Lot: 140933	Solvent (1) Lot: DM203	Misc (2) Lot: N/A	Clean Up (1) Lot: N/A	Clean Up (3) Lot: N/A
Filter?: FILTER	Solvent (2): HEXANE	Misc (3): N/A	Clean Up (2): N/A	Clean Up (4): N/A
Filter Lot: 96005041	Solvent (2) Lot: DK644	Misc (3) Lot: N/A	Clean Up (2) Lot: N/A	Clean Up (4) Lot: N/A
Balance ID: N/A	Start Time: N/A	Sonicator Tuned? N/A	Bath Temp1 (C): N/A	Therm ID1: N/A
	End Time: N/A	Balance ID: N/A	Corr Fac: N/A	Corrected Temp: N/A

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	SONC /
P0667-08AMS	MW-7	A	1000	1	OPW150324A	0.1	OPW150212A	0.1	DMP	05/14/15	01	05/04/15	JEL	R21	7	>11	<2	CNCNT
CLEAN UP (P0667-08AMS): SW3665A/ACID_150504A (LOT: B00P5448) /tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741V)																		
P0667-08AMSD	MW-7	A	1000	1	OPW150324A	0.1	OPW150212A	0.1	DMP	05/14/15	01	05/04/15	JEL	R21	7			N/A / Turbo Vap.1
CLEAN UP (P0667-08AMSD): SW3665A/ACID_150504A (LOT: B00P5448) /tmcDaniel, SW3660B/CU_150504A (LOT: MKBQ0741W)																		

Joseph E Liljgren

Analyst Reviewed

05/04/2015

Date

Timothy McDaniel

Manager Reviewed

05/04/2015

Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

PEST LCS Spike Std ID:

PCB LCS Spike Std ID:

Vol. Spiked:

Sulfuric Acid lot#

Vol. Spiked:

Sulfur cleanup Copper lot #

Soxhlet Cycle/Hour:

Sonicator Tuned? Yes/No

Reviewed By:

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2 Injection Log
GC Semivolatiles Laboratory
P6667
START BATCH: 150507AF.B ANALYST: JW
END BATCH: 150507AF.B
METHOD: 8082
ICAL DATE: 5/11/15
Start: 07-MAY-15 14:28
End: 08-MAY-15 04:56

Internal Standard:
Comments:
Reviewed By: GJNG
Manual Integration: NA
MI Review: N/A
ICV: PW150414AN
8082 ICAL
Inlet Maintenance By:
Liner :
Column :
Inlet Seal :
Septum :

FILE	TIME	LAB ID	CLIENT ID	PREP	BATCH	SURROGATES				ANALYST		COMMENTS		
						MT	FRONT	REAR	DIIN	FLAGS	CHECK			
						TCMX	DCB	TCMX	DCB	F	R	F	R	
E2P0118F/R	14:28	AR12213C2	AR12213C2	AQ								✓		PW150414C

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

JW
5/18/15

P0607

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

Spectrum Analytical, Inc. RI Division E2
GC Semivolatiles Laboratory

Injection Log

METHOD: 8082

ICAL DATE: 5/11/15

ANALYST: JLL

START BATCH: 150507AF.B Start: 07-MAY-15 14:28
END BATCH: 150507AF.B End: 08-MAY-15 04:56

Internal Standard:
Comments:

STDs on pg 95

Inlet Maintenance By:
Liner :
Column :
Inlet Seal :
Septum :

Reviewed By: Danks

Manual Integration: NA

MI Review: NA

ICV:

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	FRONT	REAR	DIIN	FLAGS	ANALYST
				BATCH	TCMX	DCB	TCMX	DCB	F	R
E2P0145F/R	20:58	ARI16605C2	ARI16605C2	AQ						
E2P0146F/R	21:13	ATBLKCA	ATBLKCA	AQ	103	69	105	68		
E2P0147F/R	21:27	ARI16603CA	ARI16603CA	AQ						
E2P0148F/R	21:42	ARI12543CA	ARI12543CA	AQ						
E2P0149F/R	21:56	ARI12423CA	ARI12423CA	AQ						
E2P0150F/R	22:11	ARI12483CA	ARI12483CA	AQ						
E2P0151F/R	22:25	ARI16603CICV	ARI16603CICV	AQ						
E2P0152F/R	22:39	MB-81958	MB-81958	AQ	78	68	85	79		
E2P0153F/R	22:54	LCS-81958	LCS-81958	AQ	91	74	100	91		
E2P0154F/R	23:08	P0667-01A	MB-4	AQ	75	57	82	69		
E2P0155F/R	23:23	P0667-02A	DUP-X	AQ	67	54	73	67		
E2P0156F/R	23:37	P0667-03A	MB-6	AQ	84	64	94	82		
E2P0157F/R	23:52	P0667-04A	MB-2R	AQ	71	54	78	65		
E2P0158F/R	00:06	P0667-05A	MB-3	AQ	56	31*	61	38*		
E2P0159F/R	00:21	P0667-06A	MB-1	AQ	83	64	78	68		
E2P0160F/R	00:35	P0667-07A	MB-5	AQ	84	59	94	79		
E2P0161F/R	00:50	P0667-08A	MB-7	AQ	82	67	92	86		
E2P0162F/R	01:04	P0667-08AMS	MB-7MS	AQ	67	54	74	68		
E2P0163F/R	01:19	P0667-08AMSD	MB-7MSD	AQ	76	55	86	71		
E2P0164F/R	01:33	MB-82037	MB-82037	AQ	74	63	84	79		
E2P0165F/R	01:48	LCS-82037	LCS-82037	AQ	74	57	83	72		
E2P0166F/R	02:02	P0726-01D	EB-1	AQ	79	44	90	55		
E2P0167F/R	02:17	P0726-03D	MB-103	AQ	77	47	88	59		
E2P0168F/R	02:32	P0726-04D	MB-106	AQ	74	52	84	64		
E2P0169F/R	02:46	P0726-04DMS	MB-106MS	AQ	73	52	83	63		
E2P0170F/R	03:01	P0726-04DMSD	MB-106MSD	AQ	72	46	82	59		
E2P0171F/R	03:15	P0726-06D	MB-104	AQ	75	52	85	65		

E One or more target compounds are above the calibration range
R One or more spike compounds are outside of control limits
* Surrogate is outside of control limits
D Surrogate is diluted

JLL
5/8/15

Logbook ID 60.0176-02/15

95

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

P0667

Spectrum Analytical, Inc. RI Division E2 Injection Log
 GC Semivolatiles Laboratory
 START BATCH: 150507AF.B ANALYST: JW METHOD: 8082 START: 07-MAY-15 14:28
 END BATCH: 150507AF.B ANALYST: 5/11/15 ICAL DATE: 5/11/15 END: 08-MAY-15 04:56

Inlet Maintenance By:
 Liner :
 Column :
 Inlet Seal :
 Septum :

STDs on pg 95

Internal Standard:
 Comments:

Reviewed By: GA Manual Integration: NA MI Review: NA ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	SURROGATES				DIIN	FLAGS			ANALYST			COMMENTS
						BATCH	TCMX	DCB	TCMX	DCB	TCMX	DCB	F	R	F	R	
E2P0172F/R	03:30	P0726-09F	MW_101	82037	AQ	51	31*	57	40	1							
E2P0173F/R	03:44	P0747-02B	ET-01-050515-GR	82037	AQ	81	52	93	66	1							
E2P0174F/R	03:59	AIBLKC	AIBLKC		AQ	102	69	110	81	1							
E2P0175F/R	04:13	AR16603CB	AR16603CB		AQ					1							
E2P0176F/R	04:27	AR12543CB	AR12543CB		AQ					1							
E2P0177F/R	04:41	AR12423CB	AR12423CB		AQ					1							
E2P0178F/R	04:56	AR12483CB	AR12483CB		AQ					1							

E - One or more target compounds are above the calibration range
 R - One or more spike compounds are outside of control limits
 * - Surrogate is outside of control limits
 D - Surrogate is diluted

JW
 5/18/15

Reviewed _____

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

START BATCH: 150512P.B
END BATCH: 150512P.B
Start: 12-MAY-15 17:42
End: 13-MAY-15 08:48

ANALYST: JW

METHOD: 8082
ICAL DATE: 5/12/15

Injection Log

E2

Spectrum Analytical, Inc. RI Division
GC Semivolatile Laboratory

Internal Standard:
Comments:

Inlet Maintenance By:
Liner :
Column :
Inlet Seal :
Septum :

8082 ICAL

Reviewed By: 5/13/15
Manual Integration: NA
MI Review: NK
ICV: PWISCH14AW

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	SURROGATES	FRONT	REAR	DILN	FLAGS	ANALYST	COMMENTS		
						TCMX	DCB	TCMX	DCB	F	R	F	R	
E2P0393F/R	17:42	AR12213E2			AQ							✓		PWISCH14C
E2P0394F/R	17:57	AR12323E2			AQ				1			✓		I
E2P0395F/R	18:11	AR12421E2			AQ				1			✓		M
E2P0396F/R	18:26	AR12426E2			AQ				1			✓		R
E2P0397F/R	18:41	AR12422E2			AQ				1			✓		N
E2P0398F/R	18:55	AR12423E2			AQ				1			✓		O
E2P0399F/R	19:09	AR12424E2			AQ				1			✓		P
E2P0400F/R	19:24	AR12425E2			AQ				1			✓		Q
E2P0401F/R	19:38	AR12481E2			AQ				1			✓		S
E2P0402F/R	19:53	AR12486E2			AQ				1			✓		X
E2P0403F/R	20:08	AR12482E2			AQ				1			✓		T
E2P0404F/R	20:22	AR12483E2			AQ				1			✓		U
E2P0405F/R	20:37	AR12484E2			AQ				1			✓		V
E2P0406F/R	20:52	AR12485E2			AQ				1			✓		W
E2P0407F/R	21:07	AR12541E2			AQ				1			✓		Y
E2P0408F/R	21:21	AR12546E2			AQ				1			✓		AD
E2P0409F/R	21:36	AR12542E2			AQ				1			✓		Z
E2P0410F/R	21:51	AR12543E2			AQ				1			✓		AA
E2P0411F/R	22:05	AR12544E2			AQ				1			✓		AB
E2P0412F/R	22:20	AR12545E2			AQ				1			✓		AC
E2P0413F/R	22:35	AR12623E2			AQ				1			✓		AG
E2P0414F/R	22:49	AR12683E2			AQ				1			✓		AM
E2P0415F/R	23:04	AR16601E2			AQ				1			✓		AQ
E2P0416F/R	23:19	AR16606E2			AQ				1			✓		AV
E2P0417F/R	23:34	AR16602E2			AQ				1			✓		AR
E2P0418F/R	23:48	AR16603E2			AQ				1			✓		AS
E2P0419F/R	00:03	AR16604E2			AQ				1			✓		PWISCH14 AT

- One or more target compounds are above the calibration range
- One or more spike compounds are outside of control limits
- Surrogate is outside of control limits
- Surrogate is diluted

Logbook ID 60.0176-05/15

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

P0667

Spectrum Analytical, Inc. RI Division E2 Injection Log
 GC Semivolatiles Laboratory
 METHOD: 8082 ANALYST: JW START BATCH: 150512F.B End: 12-MAY-15 17:42
 ICAL DATE: 5/12/15 END BATCH: 150512F.B End: 13-MAY-15 01:46

Inlet Maintenance By:
 Liner :
 Column :
 Inlet Seal: 2
 Septum :

8082 1CAC

Internal Standard:
 Comments:

Reviewed By: 06/13/15

Manual Integration: NA MI Review: NA ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP	SURROGATES						ANALYST		COMMENTS
					BATCH	MT	FRONT	REAR	DILN	FLAGS	CHECK	CHECK	
E2P0420F/R	00:17	AR16605E2	AR16605E2		102	70	104	69	1				PW150414AW
E2P0421F/R	00:32	AI8LKEA	AI8LKEA		102	70	104	69	1				
E2P0426F/R	01:46	AR16603E1CV	AR16603E1CV		102	70	104	69	1				PW150414AW

E - One or more target compounds are above the calibration range
 R - One or more spike compounds are outside of control limits
 * - Surrogate is outside of control limits
 D - Surrogate is diluted

Comments

Reviewed

JW
5/13/15

Spectrum Analytical, Inc. RI Division - PEST/PCB RUN LOGBOOK: INSTRUMENT E2

P0667

START BATCH: 150513F.B
END BATCH: 150513F.B
START: 13-MAY-15 10:51
END: 13-MAY-15 12:21

ANALYST: JW

METHOD: 8081
ICAL DATE: 5/12/15

Spectrum Analytical, Inc. RI Division E2
GC Semivolatiles Laboratory

Inlet Maintenance By:
Liner :
Column :
Inlet Seal :
Septum :

STDs on pg 11

Internal Standard:
Comments:

Reviewed By: G. Davis Manual Integration: NA MI Review: NA ICV: _____

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	SURROGATES	FRONT	REAR	DILN	FLAGS	CHECK	COMMENTS
				BATCH		TCMX	DCB	TCMX	DCB	F	R	
E2P0461F/R	10:51	AI BLKED				AQ	104	62	104	65	1	
E2P0462F/R	11:06	AR16603ED				AQ					1	
E2P0463F/R	11:20	AR12483ED				AQ					1	
E2P0464F/R	11:37	P0667-06A				AQ					1	
E2P0465F/R	11:52	AI BLKED				AQ	104	61	104	66	1	
E2P0466F/R	12:06	AR16603EC				AQ					1	
E2P0467F/R	12:21	AR12483EC				AQ					1	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
* - Surrogate is outside of control limits
D - Surrogate is diluted

Reviewed

JW
5/13/15

Internal Chain of Custody

Client: ARCADIS_CLIFTONPARK

Work Order: P0667

Profile Name: ARCADIS_OSWEGO

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
01A	001	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
01A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
02A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
02A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
02A	002	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
03A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
03A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
03A	002	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
04A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
04A	001	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
04A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
05A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
05A	001	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
06A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
06A	001	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
06A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
07A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
07A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
07A	002	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
08A	001	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
08A	002	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
08A	002	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
08A	003	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
08A	003	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
08A	004	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
08A	005	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM
08A	005	SW8082_W	Consumed	Devin M Pierel	4/29/2015 2:24:00 PM
08A	006	SW8082_W	In	LOGIN: Kpierce	4/27/2015 8:53:00 AM

Last Page of Data Report

